

MINISTRY OF THE INTERIOR, EGYPT.

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Department of Public Health.  
Cairo City Health Inspectorate.

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Report of the Medical  
Officer of Health,  
Cairo City,  
for the year  
1919



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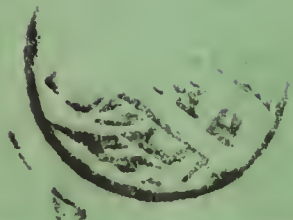
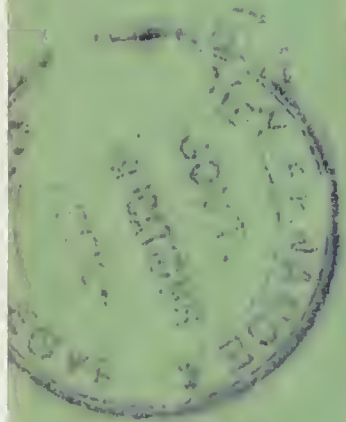
## Report of the Medical Officer of Health, Cairo City.

### List of Corrections in 1919 Report.

Page.	Line.	Wrong.	Right.	Remarks.
2	31	1918	1917	
6	13	0.615	0.615	Diphtheria, cases recorded per 1,000 of population.
7	9	8	7	Column of measles (deaths).
10	15	1.769	0.769	Table XII. Diphtheria Case Death-rate per 1,000 of Population.
12	12	0.100	0.010	Table XV. Column of Death-rate for Bûlâq.
14	18	5	4	May 6. Deaths from Influenza, 1919.
14	19	113	118	Table A. Deaths from Respiratory Diseases, 1919.
16	17	Tonsilitis.	Tonsillitis.	
24	6	70.0	70.7	
27	7	4.5	75.2	
27	8	132	123	
35	9	64.0	46.0	
41	Table XXXII	156	168	Column of total, Abbâsiya.
45	Vidange.	6,692	6,792	Notices complied with.

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# REPORT

## OF THE MEDICAL OFFICER OF HEALTH, CAIRO CITY,

### FOR THE YEAR 1919.

#### I.—VITAL STATISTICS.

##### (a) POPULATION.

The estimated mid-year population of Cairo in 1919 was 761,525, consisting of 703,818 Egyptians and 57,707 non-Egyptians. As regards the latter the Acting Controller of the Statistical Department points out that the population cannot be considered very correct for the following reasons :—

(1) The figures of the 1917 Census were considerably affected by the war and the consequent displacement of the foreign population.

(2) The definition of “Egyptian Nationality” being still surrounded by a great deal of incertitude, the nationality recorded in the registration of births and deaths is possibly incorrect in a large number of cases.

As a consequence of these two factors the death figures regarding foreigners are misleading.

To the population of 761,525 should be added, for all general purposes, the figure 24,429, this being the population of villages attached to Helwân. All public health work connected with these villages is dealt with by this Inspectorate. As, however, their death certificates and births and deaths registers do not pass through the Inspectorate but are preserved, when completed, at Gîza Mudîriya, within the circumscription of which these villages fall, in so far as the Ministry of Finance is concerned, it is necessary to exclude this figure in calculating statistics of births and deaths of Cairo.

The district distribution of the population is as follows :—

Mûsky	...	...	...	...	...	...	...	...	...	...	...	23,862	
Bâb el Sha'riya	...	...	...	...	...	...	...	...	...	...	...	65,388	
Ezbekiya	...	...	...	...	...	...	...	...	...	...	...	57,308	
Saiyêda Zeinab	...	...	...	...	...	...	...	...	...	...	...	74,136	
'Abdin	...	...	...	...	...	...	...	...	...	...	...	61,517	
Helwân	...	...	...	...	...	...	...	...	...	...	...	11,290	(35,719)
Khalifa	...	...	...	...	...	...	...	...	...	...	...	54,155	
Darb el Ahmar	...	...	...	...	...	...	...	...	...	...	...	68,873	
Gamaliya...	...	...	...	...	...	...	...	...	...	...	...	62,646	
Shubra	...	...	...	...	...	...	...	...	...	...	...	82,830	
Bûlâq	...	...	...	...	...	...	...	...	...	...	...	92,223	
Old Cairo...	...	...	...	...	...	...	...	...	...	...	...	32,581	
Wâyli	...	...	...	...	...	...	...	...	...	...	...	74,716	
												<u>761,525</u>	(785,954)

##### (b) BIRTHS.

During 1919 there occurred 31,974 births in Cairo, out of which 31,513 were native births and 461 were foreigners.

The annual birth-rate was therefore 42·0 per thousand of the population, as compared with 36·9 in 1918 and 42·0 in 1917.

For the quinquennial period ending in 1919, the mean annual rate was 40·7 per thousand, the highest rate during that period being 42·1 per thousand in 1916 and the lowest 36·9 in 1918.

The highest district birth-rate in 1919 was in Bûlâq where there were 53·7 births per thousand of population, whilst the lowest was in Helwân with 29·9. (See Table I.)

The district birth-rates as regards the city birth-rate occupy the same relative positions as in 1918, with the exception of Bâb el Sha'riya which is below this year.

TABLE I.—DISTRICT ANNUAL BIRTH-RATES PER THOUSAND OF POPULATION.

DISTRICT.	1919	1918	1917
Helwân ... ..	29·9	28·9	35·3
Ezbekiya ... ..	30·5	27·2	32·2
'Abdîn ... ..	33·7	30·0	31·7
Mûsky ... ..	34·5	29·6	31·0
Darb el Ahmar ... ..	37·1	34·4	34·4
Wâyli ... ..	39·5	35·1	46·6
Bâb el Sha'riya ... ..	41·5	37·2	42·5
Shubra ... ..	42·8	37·8	60·6
Saiyeda Zeinab ... ..	44·3	37·1	41·9
Gamâliya ... ..	44·7	40·4	42·5
Khalifa ... ..	45·6	39·7	41·7
Old Cairo ... ..	52·5	46·3	46·5
Bûlâq ... ..	53·7	44·8	47·1
TOTAL CAIRO CITY ... ..	42·0	36·9	42·0

*Still-births.*—During 1919 there were 1,215 still-births.

Of these, 1,177 were among natives and 38 were of foreign parentage.

This gives a rate of 3·8 still-births per hundred births as against 4·4 in 1918 and 3·9 in 1917.

(c) DEATHS.

During 1919 the total number of deaths in Cairo was 35,581, of which 4,034 were deaths of non-residents, leaving 31,547 as the total for Cairo City. This gives an annual death-rate of 41·4 per thousand of population as compared with 49·4 in 1918 and 35·8 in 1917.

Out of the total of deaths belonging to Cairo City 30,688 were deaths of Egyptians and 859 were foreign deaths.

For the quinquennial period ending with 1919, the mean annual rate was 41·8 per thousand of population, the highest rate for this period being 49·4 in 1918, whilst the lowest occurred in 1918 with 35·8.

TABLE II.—DISTRICT ANNUAL DEATH-RATES PER THOUSAND OF POPULATION.

DISTRICT.	1919	1918	1917
Helwân ... ..	23·7	36·8	30·4
Ezbekiya ... ..	27·0	33·8	23·4
Mûsky ... ..	35·9	35·7	25·8
Wâyli ... ..	37·1	49·5	42·5
Shubra ... ..	38·0	49·3	52·2
'Abdîn ... ..	38·0	39·8	29·1
Saiyeda Zeinab ... ..	41·4	48·7	35·1
Darb el Ahmar ... ..	41·9	46·7	29·5
Khalifa ... ..	42·5	58·0	36·4
Gamâliya ... ..	45·9	49·8	33·2
Bâb el Sha'riya ... ..	48·3	48·1	36·2
Bûlâq ... ..	49·6	63·6	39·7
Old Cairo ... ..	53·4	63·2	43·3
TOTAL CAIRO CITY ... ..	41·4	49·4	35·8



The lowest district death-rate occurred in Helwân (23·7) whilst the highest was in Old Cairo, being 53·4.

The districts with rates above or below the general City rate are the same as in 1918, with the exception of Wâyli which is below and Darb el Ahmar which is above. (See Table II.)

Chart I shows the weekly death-rate in 1919 as compared with the maximum, minimum, and mean rates during the period 1914–1918.

(d) INFANTILE MORTALITY.

The total infantile deaths in Cairo during 1919 were 7,768, a figure which includes 147 deaths of children from outside districts that occurred in various public institutions in the City. This leaves a total of 7,621 belonging to Cairo proper. The infantile mortality-rate was therefore 238 per thousand births as compared with 329 in 1918 and 262 in 1917.

For the quinquennial period ending in 1919 the mean annual death-rate was 287, the highest during this period being 329 in 1918 and the lowest this year.

As regards the various districts, the lowest mortality occurred in Helwân with 166 per thousand births, whilst the highest was in Old Cairo with 292 per thousand. (See Table III.)

TABLE III.—DISTRICT ANNUAL INFANTILE MORTALITY PER THOUSAND BIRTHS.

DISTRICT.	1919	1918	1917
Helwân ... ..	166	232	210
Ezbekîya ... ..	184	251	176
Mûsky ... ..	190	216	199
Saiyeda Zeinab ... ..	208	321	233
Gamâlîya ... ..	232	308	250
Shubra ... ..	234	344	271
‘Abdîn ... ..	236	317	264
Bûlâq ... ..	242	374	294
Darb el Ahmar ... ..	245	322	254
Wâyli ... ..	252	315	256
Khalifa ... ..	255	338	278
Bâb el Sha‘rîya ... ..	268	323	265
Old Cairo ... ..	292	423	349
TOTAL CAIRO CITY ... ..	238	329	262

Of the 7,621 deaths of children under one year, 7,549 were deaths of Egyptian infants and 72 of foreigners.

In Chart II is shown the weekly infantile mortality-rate per hundred births as compared with the maximum, minimum, and mean rates during the period 1914–1918.

In Chart III are shown the principal causes of infantile deaths.

Table IV shows the population and vital statistics for the period 1911 to 1919.

TABLE IV.—POPULATION AND VITAL STATISTICS OF CAIRO, 1911 TO 1919.

YEAR.	Population.	Number of Deaths.	Death-rate per Thousand of Population.	Infantile Deaths.	Infantile Death-rate per Thousand Births.	Number of Births.	Birth-rate per Thousand of Population.
1911 ... ..	693,806	27,981	40·3	10,414	323	32,195	46·4
1912 ... ..	704,956	26,385	37·4	9,549	303	31,555	44·8
1913 ... ..	715,609	26,413	36·9	9,250	292	31,599	44·1
1914 ... ..	725,670	26,128	36·0	8,875	283	31,314	43·1
1915 ... ..	733,423	32,554	44·3	9,592	320	29,933	40·8
1916 ... ..	740,000	28,320	38·3	9,208	295	31,170	42·1
1917 ... ..	749,000	26,804	35·8	8,248	262	31,442	42·0
1918 ... ..	760,008	37,568	49·4	9,242	329	28,047	36·9
1919 ... ..	761,525	31,547	41·4	7,621	238	31,974	42·0

Table V shows the district statistics for 1919.

TABLE V.—POPULATION AND VITAL STATISTICS IN CAIRO DISTRICTS IN 1919.

DISTRICT.	Population.	Number of Deaths.	Death-rate per Thousand of Population.	Number of Infantile Deaths (0-1 Year).	Infantile Mortality Rate per Thou- sand Births.	Number of Births.	Birth-rate per Thousand of Population.
Mûsky ... ..	23,862	856	35.9	157	190	824	34.5
Bâb el Sha'riya ... ..	65,388	3,159	48.3	728	268	2,716	41.5
Ezbekiya ... ..	57,308	1,550	27.0	322	180	1,751	30.5
'Abdîn ... ..	61,517	2,339	38.0	490	235	2,073	33.7
Saiyeda Zeinab ... ..	74,136	3,067	41.4	685	208	3,286	44.3
Khalifa ... ..	54,155	2,301	42.5	631	255	2,472	45.6
Helwân ... ..	11,290	268	23.7	56	165	338	29.9
Darb el Ahmar ... ..	68,873	2,885	41.9	627	245	2,556	37.1
Gamâliya ... ..	62,646	2,876	45.9	651	232	2,800	44.7
Shubra... ..	82,830	3,151	38.0	832	235	3,549	42.8
Bûlâq ... ..	92,223	4,578	49.6	1,199	242	4,950	53.7
Old Cairo ... ..	32,581	1,741	53.4	500	292	1,711	52.5
Wâyli ... ..	74,716	2,776	37.1	743	252	2,948	39.5
TOTAL FOR CAIRO ...	761,525	31,547	41.4	7,621	238	31,974	42.0



### III.—INFECTIOUS DISEASES.

The total number of infectious diseases recorded in Cairo during 1919 was 10,240 as against 9,703 in 1918 and 5,099 in 1917.

From this total should be deducted 368 cases coming from outside Cairo. This leaves the number of cases belonging to Cairo proper as 9,872, compared with 8,882 in 1918 and 4,976 in 1917.

Out of this total, 9,164 cases with 3,970 deaths belong to the eight principal diseases, viz. smallpox, measles, scarlet fever, diphtheria, typhoid, typhus, relapsing fever, and cerebro-spinal fever, as compared with 8,268 in 1918 and 4,304 in 1917.

This gives for these diseases a rate of 11·659 cases recorded per thousand of population, and a death-rate of 5·051 per thousand living, as against 10·535 cases with 4·328 deaths in 1918, and 5·746 cases with 2·146 deaths in 1917.

Table VI shows the case- and death-rates in the Cairo Districts for these diseases.

TABLE VI.—ZYMOTIC DISEASE CASE- AND DEATH-RATES IN 1919.

DISTRICT.	Population.	Number of Cases recorded.	Cases recorded per Thousand of Population.	Number of Deaths.	Death-rate per Thousand of Population.	Ratio of Deaths to Cases recorded.
						Per Cent.
Mûsky ... ..	23,862	346	14·500	115	4·819	32·2
Bâb el Sha'riya ... ..	65,388	936	14·314	415	6·346	44·3
Ezbekiya ... ..	57,308	639	11·269	168	2·931	26·3
'Abdin ... ..	61,517	990	16·093	364	5·917	36·8
Saiyeda Zeinab ... ..	74,136	1,036	13·974	410	5·530	39·6
Khalifa ... ..	54,155	406	7·496	186	4·434	45·8
Helwân ... ..	35,719	242	6·775	77	2·155	31·8
Darb el Ahmar ... ..	68,873	1,167	16·944	642	9·321	55·0
Gamâliya ... ..	62,646	696	11·110	424	6·768	60·9
Shubra ... ..	82,830	679	8·197	233	2·812	34·3
Bûlâq... ..	92,223	837	9·075	425	4·608	50·8
Old Cairo ... ..	32,581	385	11·816	251	7·703	65·2
Wâyli ... ..	74,716	805	10·774	260	3·479	32·3
TOTAL FOR CAIRO ... ..	785,954	9,164	11·659	3,970	5·051	43·3

Table VII shows the detailed figures of the individual diseases as compared with 1917 and 1918.

Table VIII shows the relative prevalence of the eight principal diseases in the various districts.

In Figure 1 is shown the district case- and death-rates diagrammatically.

Of the less important diseases, which amounted to 708, there were 178 of chicken pox, 101 of whooping cough, 24 of tetanus, 364 of influenza, 26 of mumps, 7 of Malta fever, and 8 of rabies.

*Smallpox.*—During 1919 there were recorded 1,455 cases of smallpox, giving a morbidity-rate of 1·851 cases per thousand of population as compared with 0·044 in 1918 and 0·64 in 1917.

There were 494 deaths from this disease or 0·628 per thousand living, as against 0·006 in 1918 and 0·006 in 1917.

The ratio of deaths to cases recorded was 33·9 per cent as compared with 14·3 in 1918 and 10·4 in 1917.

The highest incidence occurred in Saiyeda Zeinab with a rate of 2·684 per thousand of population, and the lowest in Gamâliya with 0·973.

TABLE VII.—INFECTIOUS DISEASES IN 1917, 1918, AND 1919.

DISEASE.	YEAR.	Number of Cases recorded.	Number of Deaths.	Cases recorded per Thousand of Population.	Death-rate per Thousand of Population.	Ratio of Deaths to Cases recorded.  Per Cent.
Smallpox ... ..	1917	48	5	0·064	0·006	10·4
	1918	35	5	0·044	0·006	14·3
	1919	1,455	494	1·851	0·628	33·9
Measles ... ..	1917	1,034	446	1·380	0·595	43·1
	1918	168	82	0·214	0·104	48·8
	1919	719	316	0·914	0·402	43·9
Scarlet fever ... ..	1917	293	22	0·391	0·029	7·5
	1918	81	7	0·103	0·008	8·6
	1919	39	4	0·049	0·005	10·3
Diphtheria ... ..	1917	764	352	1·020	0·469	46·1
	1918	632	232	0·805	0·295	36·7
	1919	484	150	0·015	0·190	31·0
Typhoid fever ... ..	1917	1,141	384	1·523	0·512	33·6
	1918	1,609	612	2·050	0·779	38·0
	1919	1,383	345	1·759	0·438	24·9
Typhus fever ... ..	1917	767	371	1·024	0·495	48·4
	1918	4,433	2,356	5·648	3·002	53·1
	1919	4,825	2,629	6·139	3·344	54·5
Relapsing fever ... ..	1917	244	16	0·325	0·021	6·5
	1918	1,287	93	1·639	0·118	7·2
	1919	236	20	0·300	0·025	8·5
Cerebro-spinal fever ... ..	1917	13	12	0·017	0·016	92·3
	1918	23	10	0·029	0·012	43·4
	1919	23	12	0·029	0·015	52·2
TOTALS ... ..	1917	4,304	1,608	5·746	2·146	37·4
	1918	8,268	3,397	10·535	4·328	41·1
	1919	9,164	3,970	11·659	5·051	43·3



TABLE VIII.—DISTRICT DISTRIBUTIONS OF THE PRINCIPAL ZYMOTIC DISEASES IN 1919.

DISTRICTS.	Population.	SMALLPOX.		RELAPSING FEVER.		CEREBRO-SPINAL FEVER.		TYPHUS FEVER.		TYPHOID FEVER.		SCARLET FEVER.		DIPHTHERIA.		MEASLES.		TOTAL.	
		Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.	Cases.	Deaths.
Músky...	23,862	63	33	7	—	—	—	169	55	61	12	1	—	14	4	31	11	346	115
Báb el Sha'riya...	65,388	116	23	18	2	—	—	600	325	150	44	1	—	28	8	23	13	936	415
Ezbe'kiya ...	57,308	84	22	10	1	5	3	267	110	158	18	10	2	51	8	54	4	639	168
'Abdín ...	61,517	160	50	14	4	2	1	542	267	141	21	4	—	57	4	70	17	990	364
Saiyeda Zeinab...	74,136	199	49	41	—	3	2	498	264	172	39	—	—	45	14	78	42	1,036	410
Khalifa ...	54,155	78	28	17	1	1	1	229	127	47	14	—	—	17	8	17	8	406	186
Helwân ...	35,719	49	13	17	1	1	—	81	26	26	5	—	—	17	—	51	32	242	77
Darb el Ahmar...	68,873	171	55	26	5	5	1	659	389	120	49	5	2	69	53	112	88	1,167	642
Gamáliya ...	62,646	61	18	15	1	—	—	504	349	70	26	1	—	24	13	21	17	696	424
Shubra ...	82,830	109	50	15	1	3	1	264	129	164	25	1	—	57	9	66	18	679	233
Búlaq ...	92,223	173	76	21	1	—	—	461	296	67	17	6	—	22	5	87	30	837	425
Old Cairo ...	32,581	53	31	10	—	1	1	215	142	54	38	—	—	19	11	33	28	385	251
Wáylí ...	74,716	139	46	25	3	2	2	336	150	153	37	10	—	64	13	76	9	805	260
TOTALS FOR CAIRO ...	785,954	1,455	494	236	20	23	12	4,825	2,629	1,383	345	39	4	484	150	719	316	9,164	3,970
Extra-urban Admissions to Cairo Hospitals and Military Cases ...		35	6	46	1	4	3	190	43	36	—	—	—	11	1	3	—	325	54
TOTALS ...		1,490	500	282	21	27	15	5,015	2,672	1,419	345	39	4	495	151	722	316	9,489	4,024

The highest death-rate from this disease was in Mûsky, being 1·382, whilst the lowest rate was in Gamâliya with 0·287 per thousand.

The highest ratio of deaths to cases was in Old Cairo with 58·5 per cent, and the lowest in Bâb el Sha'riya with 19·8 per cent.

Table IX shows the district case- and death-rates whilst Figure 2 shows these rates diagrammatically.

TABLE IX.—SMALLPOX CASE- AND DEATH-RATES IN CAIRO DISTRICTS IN 1919.

DISTRICT.	Population.	Number of Cases recorded.	Cases recorded per Thousand of Population.	Number of Deaths.	Death-rate per Thousand of Population.	Ratio of Deaths to Cases recorded. Per Cent.
Mûsky... ..	23,862	63	2·640	33	1·382	52·4
Bâb el Sha'riya... ..	65,388	116	1·774	23	0·351	19·8
Ezbekiya ... ..	57,308	84	1·465	22	0·383	26·2
'Abdin... ..	61,517	160	2·600	50	0·812	31·2
Saiyeda Zeinab... ..	74,136	199	2·684	49	0·660	24·6
Khalifa ... ..	54,155	78	1·440	28	0·517	35·9
Helwân ... ..	35,719	49	1·371	13	0·363	26·5
Darb el Ahmar... ..	68,873	171	2·482	55	0·798	32·2
Gamâliya ... ..	62,646	61	0·973	18	0·287	29·5
Shubra ... ..	82,830	109	1·315	50	0·603	45·9
Bûlâq ... ..	92,223	173	1·875	76	0·824	43·9
Old Cairo ... ..	32,581	53	1·626	31	0·951	58·5
Wâyli ... ..	74,716	139	1·860	46	0·615	33·1
TOTALS FOR CAIRO ... ..	785,954	1,455	1·851	494	0·628	33·9

Chart IV shows the weekly number of cases of smallpox estimated per million of population as compared with the maximum, minimum, and mean rates for the period 1914–1918.

*Measles.*—During 1919 there were 719 cases of measles with a morbidity-rate of 0·914 per thousand of population, as against 0·214 in 1918 and 1·380 in 1917.

The number of deaths was 316 or 0·402 per thousand living, as compared with 0·104 in 1918 and 0·595 in 1917.

The ratio of deaths to cases recorded was 43·9 per cent in comparison with 48·8 in 1918 and 43·1 in 1917.

TABLE X.—MEASLES CASE- AND DEATH-RATES IN CAIRO DISTRICTS IN 1919.

DISTRICT.	Population.	Number of Cases recorded.	Cases recorded per Thousand of Population.	Number of Deaths.	Death-rate per Thousand of Population.	Ratio of Deaths to Cases recorded. Per Cent.
Mûsky... ..	23,862	31	1·299	11	0·460	35·5
Bâb el Sha'riya ... ..	65,388	23	0·351	13	0·198	56·5
Ezbekiya ... ..	57,308	54	0·942	4	0·069	7·4
'Abdin ... ..	61,517	70	1·137	17	0·276	24·3
Saiyeda Zeinab... ..	74,136	78	1·052	42	0·566	53·8
Khalifa ... ..	54,155	17	0·313	7	0·129	41·2
Helwân ... ..	35,719	51	1·427	32	0·895	62·7
Darb el Ahmar ... ..	68,873	112	1·626	88	1·277	78·6
Gamâliya ... ..	62,646	21	0·335	17	0·271	80·9
Shubra ... ..	82,830	66	0·796	18	0·217	27·3
Bûlâq ... ..	92,223	87	0·943	30	0·325	34·5
Old Cairo ... ..	32,581	33	1·012	28	0·859	84·8
Wâyli ... ..	74,716	76	1·017	9	0·120	11·8
TOTALS FOR CAIRO ... ..	785,954	719	0·914	316	0·402	43·9



The highest district morbidity-rate occurred in Darb el Ahmar with 1·626 per thousand of population, whilst the lowest rate was 0·313 in Khalîfa.

The highest death-rate was in Helwân with 0·895 and the lowest in Ezbekîya with 0·069 per thousand living.

The highest ratio of deaths to cases was in Old Cairo, being 84·8 per cent and the lowest in Ezbekîya with 7·4 per cent.

Table X shows the district case- and death-rates and Figure 3 shows these rates diagrammatically.

Chart V shows the weekly number of cases estimated per million of population as compared with the maximum, minimum, and mean rates for the period 1914–1918.

*Scarlet Fever.*—The total number of cases recorded this year was 39 with a morbidity-rate of 0·049 per thousand of population, as against 0·103 in 1918 and 0·391 in 1917.

The number of deaths was 4 or a death-rate of 0·005 per thousand of population as compared with 0·008 in 1918 and 0·029 in 1917. (Table XI; Fig. 4.)

The ratio of deaths to cases was 10·3 per cent as against 8·6 in 1918 and 7·5 in 1917.

The highest district morbidity-rate was in Ezbekîya with 0·174 per thousand of population, the lowest being in Shubra with 0·012 exclusive of the districts where no cases occurred.

The highest death-rate occurred in Ezbekîya and the lowest in Darb el Ahmar with 0·034 and 0·029 respectively per thousand of population. The other districts recorded no deaths.

The highest ratio of deaths to cases was in Darb el Ahmar and the lowest in Ezbekîya with 40·0 per cent and 20·0 per cent respectively.

TABLE XI.—SCARLET FEVER CASE- AND DEATH-RATES IN CAIRO DISTRICTS IN 1919.

DISTRICT.	Population.	Number of Cases recorded.	Cases recorded per Thousand of Population.	Number of Deaths.	Death-rate per Thousand of Population.	Ratio of Deaths to Cases recorded. Per Cent.
Mûsky... ..	23,862	1	0·041	—	—	—
Bâb el Sha'riya... ..	65,388	1	0·015	—	—	—
Ezbekîya ... ..	57,308	10	0·174	2	0·034	20·0
'Abdîn ... ..	61,517	4	0·065	—	—	—
Saiyeda Zeinab... ..	74,136	—	—	—	—	—
Khalîfa ... ..	54,155	—	—	—	—	—
Helwân ... ..	35,719	—	—	—	—	—
Darb el Ahmar ... ..	68,873	5	0·072	2	0·029	40·0
Gamâliya ... ..	62,646	1	0·015	—	—	—
Shubra ... ..	82,830	1	0·012	—	—	—
Bûlâq ... ..	92,223	6	0·065	—	—	—
Old Cairo ... ..	32,581	—	—	—	—	—
Wâyli... ..	74,716	10	0·133	—	—	—
TOTALS FOR CAIRO ... ..	785,954	39	0·049	4	0·005	10·3

Chart VI shows the weekly number of cases estimated per 500,000 of population as compared with the maximum, minimum, and mean rates for the period 1914–1918.

*Diphtheria.*—The number of cases recorded in 1919 was 484 with a morbidity-rate of 0·615 per thousand of population, as compared with 0·805 in 1918 and 1·020 in 1917.

The deaths from this diseases amounted to 150 with a rate of 0·190 per thousand of population as against 0·295 in 1918 and 0·469 in 1917.

The ratio of deaths to cases for Cairo was 31·0 per cent as compared with 36·7 and 46·1 for 1918 and 1917 respectively.

The highest morbidity-rate (see Table XII) occurred in Darb el Ahmar where there were 1·001 cases per thousand of population whilst the lowest rate was in Khalîfa with 0·313 per thousand.

The highest death-rate was in Darb el Ahmar with 0·769 per thousand of population, the lowest being in Bûlâq with 0·054.



The highest ratio of deaths to cases was again in Darb el Ahmar, being 76·8 per cent and the lowest in Abdîn with 7·0 per cent.

Figure 5 shows case- and death-rates diagrammatically.

Chart VII shows the weekly number of cases estimated per million of population as compared with the maximum, minimum, and mean rates for the period 1914–1918.

TABLE XII.—DIPHTHERIA CASE- AND DEATH-RATES IN CAIRO DISTRICTS IN 1919.

DISTRICT.	Population.	Number of Cases recorded.	Cases recorded per Thousand of Population.	Number of Deaths.	Death-rate per Thousand of Population.	Ratio of Deaths to Cases recorded. Per Cent.
Mûsky ... ..	23,862	14	0·586	4	0·167	28·6
Bâb el Sha'riya... ..	65,388	28	0·428	8	0·122	28·6
Ezbekiya ... ..	57,308	51	0·889	8	0·139	15·7
'Abdîn... ..	61,517	57	0·926	4	0·065	7·0
Saiyeda Zeinab... ..	74,136	45	0·606	14	0·188	31·1
Khalifa ... ..	54,155	17	0·313	8	0·147	47·0
Helwân ... ..	35,719	17	0·475	—	—	—
Darb el Ahmar... ..	68,873	69	1·001	53	1·769	76·8
Gamâliya ... ..	62,646	24	0·383	13	0·207	54·2
Shubra ... ..	82,830	57	0·688	9	0·108	15·8
Bûlâq ... ..	92,223	22	0·238	5	0·054	22·7
Old Cairo ... ..	32,581	19	0·583	11	0·337	57·9
Wâyli ... ..	74,716	64	0·856	13	0·173	20·3
TOTALS FOR CAIRO ... ..	785,954	484	0·615	150	0·190	31·0

*Typhoid Fever.*—The total number of cases of typhoid fever recorded in 1919 was 1,383, giving a morbidity-rate of 1·759 per thousand of population as compared with 2·050 in 1918 and 1·523 in 1917.

There were 345 deaths giving a death-rate of 0·438 per thousand as against 0·779 in 1918 and 0·512 in 1917.

The ratio of deaths to cases recorded was 24·9 per cent, as compared with 38·0 in 1918 and 33·6 in 1917.

The district with the highest morbidity-rate was Ezbekîya, with a rate of 2·757 cases per thousand of population, whilst the lowest rate was in Bûlâq with 0·726.

The highest district death-rate occurred in Old Cairo with 1·666 deaths per thousand. The lowest was in Helwân with 0·139.

The highest ratio of deaths to cases was found in Old Cairo, with 70·4 per cent, and the lowest in Ezbekîya with 11·4 per cent.

TABLE XIII.—TYPHOID FEVER CASE- AND DEATH-RATES IN CAIRO DISTRICTS IN 1919.

DISTRICT.	Population.	Number of Cases recorded.	Cases recorded per Thousand of Population.	Number of Deaths.	Death-rate per Thousand of Population.	Ratio of Deaths to Cases recorded. Per Cent.
Mûsky ... ..	23,862	61	2·556	12	0·502	19·7
Bab el Sha'riya... ..	65,388	150	2·293	44	0·672	29·3
Ezbekiya ... ..	57,308	158	2·757	18	0·314	11·4
'Abdîn ... ..	61,517	141	2·292	21	0·341	14·9
Saiyeda Zeinab... ..	74,136	172	2·320	39	0·526	22·7
Khalifa ... ..	54,155	47	0·867	14	0·258	29·8
Helwân ... ..	35,719	26	0·727	5	0·139	19·2
Darb el Ahmar... ..	68,873	120	1·742	49	0·711	40·8
Gamâliya ... ..	62,646	70	1·117	26	0·415	37·1
Shubra ... ..	82,830	164	1·979	25	0·301	15·2
Bûlâq ... ..	92,223	67	0·726	17	0·184	25·4
Old Cairo ... ..	32,581	54	1·657	38	1·166	70·4
Wâyli ... ..	74,716	153	2·047	37	0·495	24·2
TOTALS FOR CAIRO ... ..	785,954	1,383	1·759	345	0·438	24·9



Table XIII shows the district case- and death-rates and in Figure 6 the rates are shown in diagrammatic form.

Chart VIII shows the weekly number of cases estimated per 500,000 of population as compared with the maximum, minimum, and mean rates for the period 1914–1918.

*Typhus*.—The number of cases recorded during 1919 was 4,825 with a morbidity-rate of 6·139 per thousand of population, as against 5·648 in 1918 and 1·024 in 1917.

The number of deaths from typhus was 2,629, being 3·344 deaths per thousand living, as compared with 3·002 in 1918 and 0·495 in 1917.

The ratio of deaths to cases was 54·5 per cent as against 53·1 in 1918 and 48·4 in 1917.

The highest district morbidity-rate occurred in Darb el Ahmar with 9·568 per thousand of population and the lowest in Helwân with 2·267.

The highest death-rate was Gamâliya with 5·570 per thousand living and the lowest in Helwân with 0·727.

The highest ratio of deaths to cases was in Gamâliya with 69·2 per cent, whilst the lowest was in Helwân with 32·1 per cent.

Table XIV shows the district case- and death-rates.

Figure 7 shows these rates diagrammatically.

Chart IX shows the weekly number of cases estimated per 500,000 of population as compared with the maximum, minimum, and mean rates for the period 1914–1918.

TABLE XIV.—TYPHUS FEVER CASE- AND DEATH-RATES IN CAIRO DISTRICTS IN 1919.

DISTRICT.	Population.	Number of Cases recorded.	Cases recorded per Thousand of Population.	Number of Deaths.	Death-rate per Thousand of Population.	Ratio of Deaths to Cases recorded. Per Cent.
Mûsky ... ..	23,862	169	7·082	55	2·304	32·5
Bab el Sha'riya... ..	65,388	600	9·175	325	4·970	54·2
Ezbekiya ... ..	57,308	267	4·659	110	1·919	41·2
'Abdîn ... ..	61,517	542	8·810	267	4·340	49·3
Saiyeda Zeinab... ..	74,136	498	6·717	264	3·561	53·0
Khalifa ... ..	54,155	229	4·228	127	2·345	55·5
Helwân ... ..	35,719	81	2·267	26	0·727	32·1
Darb el Ahmar ... ..	68,873	659	9·568	389	5·648	59·0
Gamâliya ... ..	62,646	504	8·045	349	5·570	69·2
Shubra ... ..	82,830	264	3·187	129	1·557	48·9
Bûlâq ... ..	92,223	461	4·998	296	3·209	64·2
Old Cairo ... ..	32,581	215	6·598	142	4·358	66·0
Wâyli ... ..	74,716	336	4·496	150	2·007	44·6
TOTALS FOR CAIRO ... ..	785,954	4,825	6·139	2,629	3·344	54·5

*Relapsing Fever*.—The number of cases recorded in Cairo during 1919 was 236 with a morbidity-rate of 0·300 per thousand of population as compared with 1·639 in 1918 and 0·325 in 1917.

The number of deaths was 20 or 0·025 per thousand of population as against 3·002 in 1918 and 0·495 in 1917.

The ratio of deaths to cases recorded was 8·5 per cent as against 53·1 in 1918 and 48·4 in 1917.

The highest morbidity-rate occurred in Saiyeda Zeinab where it was 0·553 per thousand of population and the lowest in Ezbekiya with 0·174.

The highest death-rate was in Darb el Ahmar with 0·072 per thousand of population and the lowest, exclusive of Mûsky, Saiyeda Zeinab, and Old Cairo, where no deaths occurred, was in Bûlâq with 0·010.

The highest ratio of deaths to cases was in 'Abdîn with 28·6 per cent and the lowest in Khalifa and Helwân with 5·9 per cent.

Table XV shows the case- and death-rates.

Figure 8 shows the case- and death-rates diagrammatically.

Chart X shows the weekly number of cases estimated per 500,000 of population as compared with the maximum, minimum, and mean rates for the period 1914–1918.



TABLE XV.—RELAPSING FEVER CASE- AND DEATH-RATES IN CAIRO DISTRICTS, IN 1919.

DISTRICT.	Population.	Number of Cases recorded.	Cases recorded per Thousand of Population.	Number of Deaths.	Death-rate per Thousand of Population.	Ratio of Deaths to Cases recorded. Per Cent.
Mûsky ... ..	23,862	7	0·293	—	—	—
Bâb el Sha'riya... ..	65,388	18	0·275	2	0·030	11·1
Ezbekiyya ... ..	57,308	10	0·174	1	0·017	10·0
'Abdîn ... ..	61,517	14	0·227	4	0·065	28·6
Saiyeda Zeinab... ..	74,136	41	0·553	—	—	—
Khalifa ... ..	54,155	17	0·313	1	0·018	5·9
Helwân ... ..	35,719	17	0·475	1	0·027	5·9
Darb el Ahmar... ..	68,873	26	0·377	5	0·072	19·2
Gamâliyya ... ..	62,646	15	0·239	1	0·015	6·7
Shubra ... ..	82,830	15	0·181	1	0·012	6·7
Bûlâq ... ..	92,223	21	0·227	1	0·100	4·8
Old Cairo ... ..	32,581	10	0·306	—	—	—
Wâyli ... ..	74,716	25	0·334	3	0·040	12·0
TOTALS FOR CAIRO ... ..	785,954	236	0·300	20	0·025	8·5

*Cerebro-Spinal Fever.*—The number of case recorded in 1919 was 23, as compared with the same number in 1918 and 13 in 1917. The morbidity-rate was therefore 0·029 per thousand of population as against 0·029 in 1918 and 0·019 in 1917.

The number of deaths was 12, giving a death-rate of 0·015 per thousand of population, as against 0·012 in 1918 and 0·016 in 1917. (Table XVI and Fig. 9.)

The ratio of deaths to cases recorded was 52·2 per cent as against 43·4 in 1918 and 92·3 in 1917.

The highest death-rate was 0·052 in Ezbekiyya and the lowest, exclusive of Mûsky, Bâb el Sha'riya, and Bûlâq, where no deaths occurred, was in Shubra with 0·012 per thousand of population.

The highest morbidity-rate occurred in Ezbekiyya with 0·087 per thousand of population and the lowest in Khalifa with 0·018, exclusive of Gamâliyya, Mûsky, Bâb el Sha'riya, and Bûlâq.

The highest ratio of deaths to cases was in Khalifa, Old Cairo, and Wâyli, each being 100·0 per cent, the lowest being in Darb el Ahmar with 20·0 per cent.

Chart XI shows the weekly number of cases estimated per 500,000 of population as compared with the maximum, minimum, and mean rates for the period 1914–1918.

TABLE XVI.—CEREBRO-SPINAL FEVER CASE- AND DEATH-RATES IN CAIRO DISTRICTS IN 1919.

DISTRICT.	Population.	Number of Cases recorded.	Cases recorded per Thousand of Population.	Number of Deaths.	Death-rate per Thousand of Population.	Ratio of Deaths to Cases recorded. Per Cent.
Mûsky... ..	23,862	—	—	—	—	—
Bâb el Sha'riya... ..	65,388	—	—	—	—	—
Ezbekiyya ... ..	57,308	5	0·087	3	0·052	60·0
'Abdîn ... ..	61,517	2	0·032	1	0·016	50·0
Saiyeda Zeinab... ..	74,136	3	0·040	2	0·026	66·7
Khalifa ... ..	54,155	1	0·018	1	0·018	100·0
Helwân ... ..	35,719	1	0·028	—	—	—
Darb el Ahmar... ..	68,873	5	0·072	1	0·014	20·0
Gamâliyya ... ..	62,646	—	—	—	—	—
Shubra ... ..	82,830	3	0·036	1	0·012	33·3
Bûlâq ... ..	92,223	—	—	—	—	—
Old Cairo ... ..	32,581	1	0·030	1	0·030	100·0
Wâyli ... ..	74,716	2	0·026	2	0·026	100·0
TOTALS FOR CAIRO ... ..	785,954	23	0·029	12	0·015	52·2



*Puerperal Fever.*—During 1919 there were 55 deaths certified as due to puerperal fever, of which 52 were deaths of Egyptian women and 3 of Europeans.

The death-rate for this disease was therefore 0·072 per thousand of the population as compared with 0·112 in 1918 and 0·073 in 1917.

Estimated on the total number of births during the year, the maternal death-rate was 1·720 per thousand births as against 3·03 in 1918 and 1·766 in 1917.

Besides these deaths there were 25 women who died within fifteen days of their confinement. If this number be added to the total of deaths certified as due to puerperal fever, the total will be 80, giving a death-rate of 0·105 or a maternal death-rate of 2·502 per thousand births.

The causes of death of the women who died within fifteen days of their confinement, apart from puerperal fever, were: hæmorrhage 4, difficult labour 1, eclampsia 7, abortion 1, peritonitis 2, typhoid 1, uræmia 1, heart disease 1, smallpox 2, dysentery 1, typhus 2, albuminuria 1, tuberculosis 1.

*Influenza.*—During 1919 the total number of cases notified as influenza was 364.

As regards the deaths from this disease there were 131 diagnosed as such as against 545 in 1918.

There were besides 4,737 deaths attributable to some form of respiratory disease, exclusive of tuberculosis, a proportion of which were most probably the result of influenza, as compared with 6,293 in 1918.

These deaths included 1,593 from pneumonia, 54 from pleurisy, 2,750 from bronchitis, and 340 from respiratory diseases.

The ratio of deaths from influenza to the total deaths in Cairo was 0·4 per cent as against 1·4 in 1918.

The ratio of deaths from the respiratory diseases was 15·0 per cent as compared with 16·7 in 1918.

It must, however, be considered that 1,025 deaths from the respiratory diseases referred to children under one year.

In Table A is shown the number of deaths, week by week, from the respiratory diseases and influenza during 1918–1919.

In the Fever Hospital Report will be found an interesting article dealing with the influenza of 1918–1919.

TABLE A.—COMPARISON OF DEATHS FROM RESPIRATORY DISEASES (EXCLUSIVE OF TUBERCULOSIS)  
AND INFLUENZA DURING 1918-1919.

WEEK ENDING.			1918.		1919.		WEEK ENDING.			1918.		1919.	
			Deaths from Respiratory Diseases.	Deaths from Influenza.	Deaths from Respiratory Diseases.	Deaths from Influenza.				Deaths from Respiratory Diseases.	Deaths from Influenza.	Deaths from Respiratory Diseases.	Deaths from Influenza.
1	January	7 ...	78	—	134	20	27	July	8...	104	—	109	—
2	"	14 ...	120	—	112	15	28	"	15...	72	—	135	—
3	"	21 ...	116	—	130	17	29	"	22...	79	—	110	—
4	"	28 ...	100	—	102	7	30	"	29...	87	1	98	—
5	February	4 ...	97	—	104	8	31	August	5...	134	—	89	—
6	"	11 ...	102	—	99	7	32	"	12...	87	—	79	1
7	"	18 ...	92	—	108	8	33	"	19...	92	1	68	—
8	"	25 ...	91	—	117	2	34	"	26...	87	1	76	—
9	March	4 ...	78	—	101	8	35	September	2...	72	—	68	—
10	"	11 ...	78	—	103	5	36	"	9...	66	—	64	—
11	"	18 ...	68	—	103	5	37	"	16...	78	—	62	—
12	"	25 ...	66	—	99	2	38	"	23...	72	1	44	—
13	April	1 ...	78	1	84	5	39	"	30...	91	1	54	—
14	"	8 ...	75	—	101	3	40	October	7...	99	3	50	—
15	"	15 ...	68	—	93	—	41	"	14...	90	1	62	—
16	"	22 ...	63	—	104	—	42	"	21...	147	5	54	1
17	"	29 ...	84	1	106	1	43	"	28...	156	10	36	—
18	May	6 ...	79	—	107	5	44	November	4...	205	11	51	—
19	"	13 ...	83	—	113	2	45	"	11...	305	28	47	—
20	"	20 ...	115	—	110	2	46	"	18...	422	41	45	1
21	"	27 ...	92	—	142	2	47	"	25...	528	60	61	—
22	June	3 ...	98	—	127	—	48	December	2...	489	74	61	—
23	"	10 ...	89	1	114	1	49	"	9...	522	90	69	1
24	"	17 ...	91	1	101	1	50	"	16...	408	95	79	—
25	"	24 ...	92	—	111	—	51	"	23...	315	70	100	2
26	July	1 ...	87	—	136	—	52	"	31...	206	48	101	—

### III.—DISINFECTION SERVICE.

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During 1919, 51,939 rooms were disinfected by the two services of 'Abbâsiya and Fum el Khalîg, the former being responsible for 36,107 rooms whilst 15,832 rooms were done by the latter. This gives a daily average of 98·9 rooms for the 'Abbâsiya Service and 43·4 for Fum el Khalîg.

Of the 36,107 rooms disinfected by the 'Abbâsiya Service, 503 were done with formaline, 15,677 with sublimate, and 19,927 with cyllin.

The Fum el Khalîg Service disinfected 348 rooms with formaline, 11,599 with sublimate, and 3,885 with cyllin.

The 'Abbâsiya Service disinfected also 270,453 articles of clothing by steam whilst Fum el Khalîg was responsible for 59,295.

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#### IV.—GOVERNMENT FEVER HOSPITAL.

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During the year 1919 there were 5,530 admissions to the Government Fever Hospital as compared with 3,723 in 1918. Of these admissions 3,712 were male and 1818 female (Table XVII).

The number of patients admitted each month was 161 in January, 326 in February, 620 in March, 582 in April, 1,100 in May, 1,145 in June, 772 in July, 290 in August, 180 in September, 124 in October, 111 in November, and 119 in December.

The admissions consisted of 1,135 cases of smallpox, 51 of chicken pox, 27 of measles, 5 of scarlet fever, 121 of typhoid fever, 2,279 of typhus fever, 329 of relapsing fever, 11 of cerebro-spinal fever, 56 of diphtheria, 9 of mumps, 13 of erysipelas, 10 of para-typhoid, 6 of para-Malta, and 1,478 other cases consisting of 750 cases sent to Hospital under a mistaken diagnosis of infectious disease, 591 persons sent in under observation in whom no disease of any sort manifested itself, and 137 mothers of young children and other persons accompanying patients. Of 750 sent to the hospital under a mistaken diagnosis, 411 were cases of influenza. The remainder were not cases of infectious disease and were found on examination to consist of 89 cases of enteritis, 16 cases of pneumonia, 37 cases of bronchitis, 15 cases of pulmonary tuberculosis, 6 cases of mania, 55 cases of malaria, 5 cases of tetanus, 7 cases of tonsillitis, 3 cases of whooping cough, 6 cases of rheumatism, 8 cases of dysentery, 33 cases of various skin diseases, and 59 such other cases as pyæmic abscess, pleurisy, cancer, heart disease, gangrenous peritonitis, senility, etc.

Of the 5,530 admissions, 191 were 1st class, 598 2nd class, and 4,641 3rd class patients (Table XVIII).

The admissions from the eight principal notifiable diseases (smallpox, measles, scarlet fever, diphtheria, typhoid fever, relapsing fever, and cerebro-spinal fever) were 3,963.

From the hospital admissions, however, should be deducted 687 military and extra-urbans.

There were 856 deaths in the hospital during 1919 or, estimated on the 5,530 admissions, 15·5 per cent of the cases admitted.

Of these there were 198 caused by smallpox, giving a hospital case mortality of 17·4 per cent for this disease, 4 by measles with a case mortality of 14·8 per cent, 1 by scarlet fever with a case mortality of 20·0 per cent, 27 by typhoid fever with a case mortality of 22·3 per cent, 525 by typhus fever with a case mortality of 23·0 per cent, 10 by relapsing fever with a case mortality of 3 per cent, 9 by cerebro-spinal fever with a case mortality of 81·8 per cent, 10 by diphtheria with a case mortality of 17·8 per cent, 2 by erysipelas with a case mortality of 15·3 per cent, 2 by malaria, 11 by pneumonia, and 4 by tetanus (Table XIX).

In addition there were 53 deaths amongst patients sent in under a mistaken diagnosis of various infectious diseases and whose condition on arrival did not permit of a refusal of admission. Of these, 3 were heart disease, 8 bronchitis, 3 senility, 3 diarrhoea, 3 dysentery, 2 premature labour, 1 rabies, 3 septicaemia, 6 pulmonary tuberculosis, 1 liver abscess, 1 empyema, 1 abortion, 18 gastro-enteritis.

Included amongst the 5,530 third class admissions were 203 sick convicts from the Cairo prisons. Of these, 11 were smallpox, 13 typhoid fever, 61 typhus fever, 24 relapsing fever, 2 diphtheria, 5 mumps, 2 erysipelas, 4 Malta fever, 6 malaria, 2 pneumonia, 29 influenza, 12 enteritis, 11 observation cases, and 21 sent in under a mistaken diagnosis (Table XX).

The 21 convict cases admitted under a mistaken diagnosis included cases of tonsillitis, pyæmic abscesses, heart disease, gangrene, bronchitis, and skin disease.

Of the convict patients 11 died, death being due to typhus in 9 cases, smallpox in one case, and pneumonia in one case (Table XXI).

The convict case mortality was therefore 5·4 per cent of the total number of convicts admitted in 1919.

In the Hospital Laboratory 3,674 examinations of specimens were carried out during

TABLE XVII.—GOVERNMENT FEVER HOSPITAL.  
MALE AND FEMALE PATIENTS ADMITTED EACH MONTH AND THE DISEASES FOR WHICH  
THEY WERE ADMITTED IN 1919.

MONTH.	SEX.	Smallpox.	Chicken-pox.	Measles.	Scarlet Fever.	Typhoid Fever.	Typhus Fever.	Relapsing Fever.	Cerebro-spinal Fever.	Diphtheria.	Mumps.	Bubonic Plague.	Erysipelas.	Other Diseases.	Observation Cases.	Persons accompanying Sick.	Paratyphoid Fever.	Para-Malta Fever.	TOTALS.
January	Male ...	11	—	—	—	2	20	6	1	2	—	—	1	62	36	1	—	1	143
	Female ...	6	—	—	—	2	3	—	—	1	—	—	—	2	1	3	—	—	18
February	Male ...	39	—	—	—	1	69	39	—	3	1	—	1	39	57	—	—	—	249
	Female ...	32	—	—	—	2	20	4	—	2	—	—	—	8	3	6	—	—	77
March...	Male ...	88	—	2	—	6	169	48	2	2	—	—	1	36	48	5	—	2	409
	Female ...	60	—	2	—	4	61	12	1	4	1	—	2	28	19	17	—	—	211
April ...	Male ...	89	9	1	1	13	201	26	1	—	1	—	—	30	26	—	—	—	398
	Female ...	43	6	—	—	6	80	5	3	1	1	—	—	18	20	1	—	—	184
May ...	Male ...	153	12	1	1	10	385	40	1	1	1	—	2	47	75	—	—	—	729
	Female ...	108	4	2	—	6	166	13	—	2	—	—	—	15	55	—	—	—	371
June ...	Male ...	140	7	5	1	3	380	39	—	1	—	—	2	50	69	3	—	—	700
	Female ...	125	4	2	—	6	207	15	—	2	—	—	1	24	35	24	—	—	445
July ...	Male ...	60	1	4	—	8	231	41	—	2	2	—	2	80	43	4	—	3	481
	Female ...	59	3	2	—	1	138	2	—	3	1	—	—	38	19	25	—	—	291
August	Male ...	28	1	1	—	4	75	13	—	1	—	—	—	50	25	4	—	—	202
	Female ...	15	3	—	—	2	28	2	—	2	—	—	—	20	7	9	—	—	88
September	Male ...	15	—	—	—	11	12	7	—	3	—	—	—	77	11	1	2	—	139
	Female ...	3	—	—	—	5	5	—	—	1	1	—	—	16	5	5	—	—	41
October	Male ...	15	—	1	—	6	10	5	—	8	—	—	—	28	9	1	2	—	85
	Female ...	10	—	—	—	5	4	—	—	3	—	—	—	7	1	9	—	—	39
November	Male ...	8	—	—	1	7	11	6	2	7	—	—	—	43	—	3	1	—	89
	Female ...	3	—	2	1	2	—	—	—	—	—	—	—	5	—	6	1	—	22
December	Male ...	17	1	1	—	7	2	4	—	5	—	—	—	24	24	2	1	—	88
	Female ...	8	—	1	—	2	2	—	—	—	—	—	1	3	3	8	3	—	31
1919 ...	Male ...	663	31	16	4	78	1565	274	7	35	5	—	9	566	423	24	6	6	3,712
	Female ...	472	20	11	1	43	714	55	4	21	4	—	4	184	168	113	4	—	1,818
TOTALS ...		1135	51	27	5	121	2279	329	11	56	9	—	13	750	591	137	10	6	5,530



TABLE XVIII.—GOVERNMENT FEVER HOSPITAL.

ADMISSIONS BY CLASSES PER MONTH AND THE DISEASES FOR WHICH THEY WERE ADMITTED  
DURING 1919.

MONTH.	CLASS.	Smallpox.	Chicken-pox.	Measles.	Scarlet Fever.	Typhoid Fever.	Typhus Fever.	Relapsing Fever.	Cerebro-spinal Fever.	Diphtheria.	Mumps.	Bubonic Plague.	Erysipelas.	Other Diseases.	Observation Cases.	Persons accompanying Sick.	Paratyphoid Fever.	Para-Malta Fever.	TOTAL.
January ...	First ...	1	—	—	—	—	1	—	—	—	—	—	—	—	—	—	—	—	2
	Second ...	3	—	—	—	3	10	—	1	2	—	—	—	1	—	3	—	—	23
	Third ...	13	—	—	—	1	12	6	—	1	—	—	1	63	37	1	—	1	136
February	First ...	3	—	—	—	—	6	—	—	—	—	—	—	—	—	1	—	—	10
	Second ...	16	—	—	—	2	18	—	—	2	—	—	—	3	—	2	—	—	43
	Third ...	52	—	—	—	1	65	43	—	3	1	—	1	44	60	3	—	—	273
March ...	First ...	7	—	1	—	1	17	—	—	2	—	—	—	—	—	5	—	—	33
	Second ...	43	—	—	—	—	33	3	—	2	—	—	1	4	2	10	—	—	98
	Third ...	98	—	3	—	9	180	57	3	2	1	—	2	60	65	7	—	2	489
April ...	First ...	4	—	—	—	—	13	—	—	—	—	—	—	—	—	—	—	—	17
	Second ...	42	4	—	—	3	30	—	—	—	—	—	—	1	8	—	—	—	88
	Third ...	86	11	1	1	16	238	31	4	1	2	—	—	47	38	1	—	—	477
May... ..	First ...	10	—	2	—	—	19	—	—	—	—	—	—	—	6	—	—	—	37
	Second ...	51	4	1	1	—	52	—	1	1	—	—	—	2	9	—	—	—	122
	Third ...	200	12	—	—	16	480	53	—	2	1	—	2	60	115	—	—	—	941
June ...	First ...	14	—	—	—	—	17	—	—	—	—	—	—	—	3	5	—	—	39
	Second ...	32	4	1	1	—	77	6	—	—	—	—	—	9	12	6	—	—	145
	Third ...	219	7	6	—	9	493	48	—	3	—	—	3	68	89	16	—	—	961
July... ..	First ...	3	—	—	—	—	16	—	—	—	—	—	—	3	—	5	—	—	27
	Second ...	15	—	—	—	—	27	1	—	—	—	—	—	4	4	12	—	1	64
	Third ...	101	4	6	—	9	326	42	—	5	3	—	2	111	58	12	—	2	681
August ...	First ...	3	—	—	—	1	4	—	—	—	—	—	—	—	1	1	—	—	10
	Second ...	6	—	—	—	1	14	—	—	1	—	—	—	2	2	4	—	—	30
	Third ...	34	4	1	—	4	85	15	—	2	—	—	—	68	29	8	—	—	250
September	First ...	1	—	—	—	—	—	—	—	—	—	—	—	—	—	2	—	—	3
	Second ...	5	—	—	—	1	3	1	—	—	—	—	—	1	1	1	—	—	13
	Third ...	12	—	—	—	15	14	6	—	4	1	—	—	92	15	3	2	—	164
October ...	First ...	—	—	—	—	1	—	—	—	1	—	—	—	—	—	1	—	—	3
	Second ...	7	—	—	—	—	3	—	—	2	—	—	—	—	—	4	—	—	16
	Third ...	18	—	1	—	10	11	5	—	8	—	—	—	35	10	5	2	—	105
November	First ...	—	—	—	—	—	1	—	—	1	—	—	—	1	—	—	—	—	3
	Second ...	5	—	2	2	2	4	1	1	—	—	—	—	1	—	4	2	—	24
	Third ...	6	—	—	—	7	6	7	1	6	—	—	—	46	—	5	—	—	84
December	First ...	4	—	—	—	2	1	—	—	—	—	—	—	—	—	—	—	—	7
	Second ...	10	—	1	—	—	1	2	—	—	—	—	—	6	6	6	—	—	32
	Third ...	11	1	1	—	7	2	2	—	5	—	—	1	21	21	4	4	—	80
1919... ..	First ...	50	—	3	—	5	95	—	—	4	—	—	—	4	10	20	—	—	191
	Second ...	235	12	5	4	12	272	14	3	10	—	—	1	31	44	52	2	1	698
	Third ...	850	39	19	1	104	1912	315	8	42	9	—	12	715	537	65	8	5	4,641
TOTALS ...		1135	51	27	5	121	2279	329	11	56	9	—	13	750	591	137	10	6	5,530



TABLE XIX.—MONTHLY MORTALITY INCIDENCE IN 1919.

MONTH.	Smallpox.	Chicken-pox.	Measles.	Scarlet Fever.	Typhoid Fever.	Typhus Fever.	Relapsing Fever.	Cerebro-spinal Fever.	Diphtheria.	Erysipelas.	Other Diseases.	Malaria.	Pneumonia.	Mumps.	Tetanus.	Paratyphoid Fever.	Para-Malta.	TOTAL.
January... ..	2	—	—	—	—	6	—	1	1	—	7	2	2	—	—	—	—	21
February ... ..	10	—	—	—	—	17	1	—	—	—	—	—	1	—	1	—	—	30
March ... ..	21	—	—	—	1	43	2	2	—	—	5	—	—	—	2	—	—	76
April ... ..	19	—	—	—	3	59	1	3	—	—	7	—	1	—	—	—	—	93
May ... ..	49	—	—	—	5	122	1	—	3	—	—	—	2	—	—	—	—	185
June ... ..	44	—	1	—	2	136	5	—	1	1	10	—	2	—	1	—	—	203
July ... ..	24	—	2	—	2	103	—	1	—	—	9	—	1	—	—	—	—	142
August ... ..	9	—	—	—	2	26	—	—	1	1	5	—	—	—	—	—	—	44
September ... ..	6	—	—	—	1	6	—	—	1	—	4	—	—	—	—	—	—	18
October ... ..	10	—	—	—	4	3	—	—	2	—	1	—	—	—	—	—	—	20
November ... ..	1	—	—	—	3	4	—	2	1	—	1	—	2	—	—	—	—	14
December ... ..	3	—	1	1	4	—	—	—	—	—	1	—	—	—	—	—	—	10
TOTAL ...	198	—	4	1	27	525	10	9	10	2	53	2	11	—	4	—	—	856

TABLE XX.—MONTHLY CONVICT ADMISSIONS AND DISEASES FROM WHICH THEY WERE ADMITTED IN 1919.

MONTH.	Smallpox.	Typhoid Fever.	Typhus Fever.	Relapsing Fever.	Diphtheria.	Mumps.	Erysipelas.	Malta.	Malaria.	Pneumonia.	Influenza.	Enteritis.	Other Diseases.	Observation.	TOTAL.
January ... ..	—	—	—	—	—	—	—	2	—	—	4	1	—	—	7
February ... ..	1	—	3	4	—	—	—	—	—	—	1	—	—	1	10
March ... ..	3	—	10	2	—	1	—	—	—	—	—	—	—	1	17
April ... ..	2	2	11	2	—	—	—	—	—	—	1	—	3	2	23
May ... ..	3	2	12	4	—	1	2	—	—	—	3	—	9	1	37
June ... ..	2	—	15	4	—	—	—	—	3	—	2	—	2	2	30
July ... ..	—	—	3	7	2	3	—	1	1	1	9	6	5	1	39
August ... ..	—	1	5	—	—	—	—	—	—	—	4	1	1	2	14
September... ..	—	3	—	—	—	—	—	—	1	—	2	—	1	—	7
October ... ..	—	2	—	—	—	—	—	1	1	—	—	—	—	—	4
November ... ..	—	—	1	—	—	—	—	—	—	—	1	—	—	—	2
December ... ..	—	3	1	1	—	—	—	—	—	1	2	4	—	1	13
TOTAL ...	11	13	61	24	2	5	2	4	6	2	29	12	21	11	203

TABLE XXI.—MONTHLY CONVICT MORTALITY AND CAUSES OF DEATH IN 1919.

MONTH.	Smallpox.	Typhus Fever.	Pneumonia.	TOTAL.
January ... ..	—	—	—	—
February ... ..	—	—	—	—
March ... ..	1	1	—	2
April ... ..	—	2	—	2
May ... ..	—	1	—	1
June ... ..	—	2	—	2
July ... ..	—	3	—	3
August ... ..	—	—	—	—
September ... ..	—	—	—	—
October ... ..	—	—	—	—
November ... ..	—	—	—	—
December ... ..	—	—	1	1
TOTAL ... ..	1	9	1	11



the year. These include 82 films for malaria, 740 for relapsing fever, 121 for Widal's reaction for typhoid, 121 for Widal's reaction for para-typhoid A, 121 for Widal's reaction for para-typhoid B, 16 for para-Malta, 16 for Malta, 2,279 for Weil-Felix, 30 specimens of sputa for T.B., 126 swabs for diphtheria, 22 specimens of fluid for cerebro-spinal fever.

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### Fever Hospital Report on the Influenza Epidemic of 1918-1919.

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Au cours de la pandémie de 1918-1919 j'ai eu l'occasion de voir presque toutes les formes de grippe, mais les deux types qui ont prédominé furent la forme fébrile simple et la forme grippale avec localisations respiratoires inférieures. Les formes abdominales peu nombreuses n'étaient pas pour cela moins typiques; quant aux formes nerveuses pures elles étaient d'une rareté exceptionnelle dans cette épidémie. Quoique bon nombre des cas présentaient des symptômes nerveux plus ou moins marqués, ceux-ci n'étaient pas à un tel point qu'ils dominaient le tableau clinique de façon à masquer les manifestations pulmonaires ou abdominales.

Durant la pandémie en question 891 cas furent soignés à l'Hôpital des Maladies Infectieuses du Caire avec 43 décès, soit une mortalité légèrement au-dessous de 5 pour cent.

La mortalité était presque nulle chez les enfants au-dessous de cinq ans. A partir de cet âge jusqu'à 20 ans elle a augmenté en proportion presque directe avec l'âge. Entre 20 et 45 ans, la mortalité était à son maximum; au-dessus de cet âge elle a décliné de nouveau pour diminuer beaucoup durant la vieillesse.

La mortalité était sensiblement plus élevée parmi la classe pauvre dont les malades, en général, étaient plus ou moins épuisés par la misère et les privations.

L'insouciance qu'avaient souvent ces derniers à ne recourir à l'assistance médicale que lorsque le mal était déjà avancé contribuait aussi à aggraver leur état.

Je n'ai pas remarqué que la profession ait une influence certaine sur la mortalité.

La tuberculose et la malaria au début n'ont pas une influence sur la mortalité tandis que la grossesse et l'alcoolisme la rendaient sensiblement plus grande.

#### (a) PATHOLOGIE.

Le catarrhe des voies respiratoires supérieures a été assez observé dans ces formes fébriles simples qui ont fourni la majorité des cas de la première période de la pandémie (de Mai jusqu'à fin Août 1918). Joint aux localisations respiratoires inférieures il fut presque la règle durant la seconde période (de Septembre 1918 jusqu'à fin Février 1919).

Les rares cas de localisations dans les voies respiratoires inférieures tels que pneumonie, broncho-pneumonie, œdème des poumons, qui ont été constatés au début de la pandémie, furent en général peu graves.

Durant la première période de la pandémie la forme fébrile simple est celle qui a prédominé; tandis que les cas graves, hypertoxiques et pneumoniques, formaient les traits saillants de la seconde période, surtout en Novembre et Décembre 1918.

Dans bon nombre de cas les phénomènes pulmonaires ont apparu d'emblée. En général ces cas étaient plus graves que ceux où les complications pulmonaires étaient tardives.

La pneumonie grippale, initiale ou tardive, était en général une broncho-pneumonie; la pneumonie endémique est d'habitude lobaire; cette dernière a été une complication exceptionnellement rare dans cette pandémie. Bon nombre de cas qui présentèrent les signes physiques d'une pneumonie lobaire étaient en réalité des broncho-pneumonies à foyers plus ou moins confluent. L'épidémie de pneumonie qui sévit en France sur les troupes noires n'a pas été observée en Egypte.

La résistance des enfants a été en général beaucoup plus grande que celle des adultes et des vieillards. Ces derniers, quoique moins fréquemment atteints que les sujets jeunes et vigoureux, supportaient moins bien la maladie.



Toute chose égale, les sujets chétifs succombaient plus fréquemment que ceux qui étaient vigoureux.

La tuberculose et la malaria à moins d'être avancées ne semblaient pas influencer l'évolution de la maladie. L'alcoolisme, la grossesse, ainsi que les états rénaux rendaient le pronostic plus grave. Quant aux états cardiaques ils n'affectaient pas la marche de la maladie.

(i) *Forme Fébrile Simple*.—Particulièrement bénigne, en général début brusque avec frisson, la température atteignant 40°–41° dans l'espace de quelques heures. Mal de tête présent dans presque tous les cas. Douleur mobile et courbature des membres étaient très fréquentes. Conjonctives souvent injectées. Langue d'habitude couverte d'un enduit blanchâtre, quelquefois propre. Epistaxis présente dans bon nombre de cas. Vomissements légers et se produisant surtout au début. Localisations dans les voies respiratoires supérieures accompagnées rarement de lésions du côté des poumons. Toux fréquente existant souvent indépendamment de toute localisation dans les voies respiratoires inférieures. Pouls d'habitude rapide, dur et tendu. Durée de la fièvre de deux à trois jours en général, quelquefois elle traîne plus longuement. Défervescence d'habitude brusque et accompagnée de diaphorèse; parfois elle se fait graduellement. Convalescence souvent rapide, quelquefois longue et traînante.

(ii) *Forme Abdominale*.—En général rare dans cette pandémie. A part les symptômes déjà décrits, les troubles digestifs étaient marqués à un tel point qu'ils prédominaient le tableau clinique. L'anorexie était en général complète, les vomissements fréquents et pénibles. La diarrhée souvent forte, quelquefois pseudo-dysentérique. Enfin la douleur du ventre était dans quelques cas tellement intense qu'elle faisait penser à une grave affection de l'abdomen nécessitant une laparatomie.

(iii) *Forme Grave Hypertoxique ou Pneumonique*.—Particularités cliniques, complications et séquelles :—

(1) La pneumonie initiale ou tardive qui a sévi durant cette pandémie était d'habitude une broncho-pneumonie, rarement une pneumonie lobaire.

(2) Les bronchites et congestions pulmonaires étaient d'intensité variable allant quelquefois jusqu'à la broncho-pneumonie.

(3) Les hémoptysies étaient fréquentes surtout durant la deuxième période.

(4) La pleurésie sèche ou avec exudat séreux se rencontrait quelquefois. La pleurésie purulente était plus rare. Les deux constituaient des phénomènes plutôt tardifs.

(5) L'épistaxis fréquente même dans les formes fébriles simples n'était jamais grave.

(6) Les troubles cardio-vasculaires se manifestaient le plus souvent sous forme de dilatation cardiaque, quelquefois il y avait une vraie myocardite. Les angines pectorales s'observaient seulement dans peu de cas. Les phlébites et les gangrènes étaient rares.

(7) L'ictère, le délire ainsi que les autres symptômes d'hypertoxicité s'observaient assez souvent et étaient de mauvais pronostic.

(8) L'albuminurie massive ou la néphrite aiguë urémigène existaient dans quelques cas. Elles étaient aussi de très mauvais pronostic.

(9) La péritonite n'est survenue chez aucun de mes malades.

(10) L'exanthème que j'ai observée durant cette pandémie était une érythème simple, d'ordinaire général, quelquefois localisée à l'abdomen et à la poitrine.

(11) L'otite moyenne, le méningisme, la méningite, les névrites étaient des rares complications.

(12) Quelques-uns de mes malades ont développé les formes de psychose suivantes à la suite de leur grippe. Manie délirante aiguë, hallucination de vue, d'ouïe et d'odorat, démence précoce, mélancolie, hypochondrie, insomnie, paranoïa.

Les cas d'influenza abdominale étaient tous à forme diarrhéique ou pseudo-dysentérique, la forme cholériforme n'a pas été observée. Ces cas n'ont pas constitué un foyer épidémique.



(b) ETIOLOGIE.

En général les personnes qui furent atteintes durant la première invasion ont échappé à l'infection durant la deuxième. Il y a eu plusieurs cas qui ont présenté un tableau clinique très caractéristique de grippe pendant la première période de la pandémie et qui cependant ont présenté un autre tout à fait identique durant la seconde partie.

Les récidives n'ont pas toujours présenté un caractère particulier de bénignité. Certains d'entre eux au contraire pouvaient être comptés parmi les plus graves. Un chef infirmier à mon hôpital eut des symptômes très caractéristiques de grippe fébrile simple au mois de Juillet. Au mois de Novembre de la même année, il fut atteint de la forme grave avec broncho-pneumonie qui se termina heureusement par la guérison.

Les observations cliniques tendent toujours à donner l'impression que l'immunité acquise à la suite d'une attaque de grippe n'est que fugace. En l'absence de méthodes bactériologiques pour établir un diagnostic sûr il serait peut-être prématuré de trancher définitivement la question en nous basant sur les observations cliniques seules. La thèse selon laquelle la résistance des vieillards serait due à une immunité acquise durant les précédentes épidémies n'est pas exacte. Le fait que bon nombre de personnes furent atteintes durant la pandémie en question malgré qu'elles aient assisté à d'autres épidémies d'influenza est très significatif.

Les individus en traitement par la quinine, l'arsenic ou le salvarsan n'ont nullement échappé à l'infection.

(c) PROPHYLAXIE.

L'usage du masque avec protection de la conjonctive par des lunettes nous a paru de grande utilité pour les médecins et le personnel infirmier. Les antiseptiques sont de bons adjuvants de prophylaxie qu'il ne faut pas abandonner. Quant aux drogues administrées à l'intérieur à titre préventif elles ne méritent aucune attention.

Les vaccins administrés à titre préventif ne nous ont paru d'aucune utilité. Administrés à titre curatif et seulement tout à fait au début ils ont semblé amoindrir le risque des complications pulmonaires. Les vaccins dont nous avons fait usage étaient des stock-vaccins préparés par Parke, Davis and Co., de Londres. Quant au sérum nous ne nous en sommes pas servi.

Il n'y a pas un remède qui mérite une attention spéciale. Le traitement comme dans beaucoup d'autres infections reste symptomatique.

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## V.—AMBULANCE SERVICE.

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During 1919 there were 3,472 calls made on the Ambulance Service as compared with 4,904 in 1918 and 1,869 in 1917. The number of journeys made by the 1st class horse ambulance was 200 whilst 300 were made by the 2nd class ambulances, 400 by the 3rd class, and 2,515 by the hooded carts.

There were also 57 journeys made by the motor ambulance which was added to the ambulance equipment.

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## VI.—DEATH INQUIRIES.

During 1919 there were 22,309 deaths in Cairo of persons who had received no medical attendance during their last illness. So that, estimated on the 35,581 total deaths during the year, the proportion of uncertified deaths was 62·7 per cent, but as the investigations into these uncertified deaths concerned only cases of Cairo origin, the percentage should be calculated on the 31,547 deaths of persons belonging to Cairo. This would give a ratio of uncertified to total deaths of 70·0 per cent as compared with 72·4 in 1918 and 73·4 in 1917.

The investigations were made in 16,581 cases, or 78·8 per cent, by the District Medical Officers; in 5,501 cases, or 24·7 per cent, by the District *Hakîmas*, whilst in the villages remote from, but attached to the City, 166 cases, or 0·7 per cent, were dealt with by the sanitary barbers, and 61 cases, or 0·3 per cent, by the village midwives (Table XXII).

The average daily number of inquiries held in 1919 was 61·09 per cent as against 74·5 in 1918 and 53·9 in 1917. Of these 45·4 were held by the District Medical Officers as against 53·3 in 1918 and 37·6 in 1917, 15·07 by the *Hakîmas* as compared with 20·9 in 1918 and 11·2 in 1917, 0·45 by the sanitary barbers as against 0·3 in 1918 and 4·6 in 1917, and 0·16 by the village midwives as compared with 0·04 in 1918 and 0·4 in 1917.

TABLE XXII.—DISTRIBUTION OF UNCERTIFIED DEATHS AND DEATH INQUIRIES IN THE VARIOUS DISTRICTS IN 1919.

DISTRICT.	All Deaths.	UNCERTIFIED DEATHS.					Percentage of Deaths Uncertified.
		Investigated by District Medical Officers.	Investigated by District <i>Hakîmas</i> .	Investigated by Village Sanitary Barbers.	Investigated by Village <i>Dâyas</i> .	District Totals.	
							Per Cent.
Mûsky ... ..	856	340	91	—	—	431	50·3
Bâb el Sha'riya ... ..	3,159	1,485	468	—	—	1,953	61·8
Ezbekiya ... ..	1,550	362	123	—	—	485	31·3
'Abdîn ... ..	2,339	1,136	339	—	—	1,475	63·1
Saiyeda Zeinab ... ..	3,067	1,477	759	—	—	2,236	72·6
Helwân ... ..	268	137	27	—	—	164	61·2
Khalifa ... ..	2,301	1,510	448	—	—	1,958	85·1
Darb el Ahmar ... ..	2,885	1,630	466	—	—	2,096	79·6
Gamâliya ... ..	2,876	1,292	654	—	—	1,946	67·7
Shubra ... ..	3,151	1,929	371	81	8	2,389	75·8
Bûlâq ... } Bûlâq I ... ..	4,578	1,742	899	—	—	2,641	86·1
} Bûlâq II ... ..		963	338	—	—	1,301	
Old Cairo ... ..	1,741	1,206	260	—	53	1,519	87·2
Wâyli ... } Zeitûn ... ..	2,776	623	57	85	—	765	61·8
} 'Abbâsiya ... ..		749	201	—	—	950	
TOTALS FOR CAIRO ... ..	31,547	16,581	5,501	166	61	22,309	70·7

The Medical Officer of Shubra held the largest number of inquiries, having a daily average of 5·3, whilst the lowest number was carried out by the Medical Officer of Helwân, having a daily average of 0·37.

The *Hakîma* of Bûlâq I investigated the largest number of deaths with a daily average of 2·46, whilst the *Hakîma* of Helwân had the smallest daily average, *i.e.* 0·07.

## VII.—VACCINATIONS.

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During 1919 there were 125,475 vaccinations carried out by the Medical Officers of the Inspectorate and districts.

Of these, 27,292 were primary vaccinations, 26,963 of which were on native children and 329 on children of foreign parentage. This is as compared with 25,613 in 1918 and 29,262 in 1917. The remaining 98,183 were secondary vaccinations of persons voluntarily applying or of contacts of smallpox cases.

Of these revaccinations 35,890 were carried out by the Medical Officers of the Inspectorate and 62,293 by the District Medical Officers.

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### VIII.—MEDICO-LEGAL AND POLICE.

The medical work carried out by the Medical Officers of Police during the year 1919 was as follows:—

NATURE OF WORK.	NUMBER OF CASES.
Medico-legal examinations of persons for slight injuries requiring less than twenty days' treatment ... ..	5,613.
Medico-legal examinations for more serious cases requiring more than twenty days. Some of them received first aid from the Police Medical Officers and others were sent to Qasr el 'Aini Hospital ... ..	153.
Medico-legal examinations of persons killed in the streets by accident or where the causes of death were suspected by the Qism Medical Officers ... ..	237
Examinations of persons where no period of treatment was necessary (Police Circular)	26
Injured persons recommended for a second examination on account of permanent deformities resulting from their injuries ... ..	292
Examination of persons on account of lunacy either sent to asylum or retained at their houses ... ..	131
Ghafirs examined on entering service on request of the Commandant's Office ... ..	775.
Persons examined and sent to Qasr el 'Aini Hospital ... ..	403.
Policemen examined at request of the Personnel Office of the Ministry of Interior on account of sickness ... ..	800.
Cab drivers and carters examined at request of the Traffic Office ... ..	1,929
Persons sent to Fever Hospital as suffering from suspected cases of infectious disease	191
Ghafirs examined on account of sickness ... ..	1,928
Number of examinations performed by the medical officers elsewhere than at the Governorate ... ..	748
Constables and policemen treated at Office ... ..	317
Constables and policemen admitted to Police Infirmary ... ..	759
Constables and policemen admitted to Qasr el 'Aini Hospital ... ..	514
Constables and policemen sent to Fever Hospital as suffering from suspected cases of infectious disease ... ..	210
Pieces of minced food prepared for dog poisoning ... ..	1,770
Nominations from Parquet and Qism Police Officers for examination of criminals and injured persons ... ..	173
Examination of persons in connection with the Pension Law... ..	26
Shoeblacks examined for fitness or otherwise ... ..	19
New policemen examined for eyesight ... ..	129
Number of medico-legal reports written to replace lost reports ... ..	31
Examination of sodomites for venereal diseases, etc. ... ..	15
Vagabonds sent by the Qisms ... ..	35
Constables and policemen vaccinated... ..	869
Constables and policemen examined to be brought before Court Martial ... ..	61

## IX.—PROSECUTIONS.

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Of the prosecutions instituted in 1918, 236 cases were stated in the report for that year to be still under consideration at the end of the year.

During the year 1919, 1,533 fresh prosecutions were instituted for offences against the Sanitary Laws and Regulations compared with 1,853 in the previous year, there being therefore a total of 1,769 cases under consideration in 1919.

Of this total, convictions were obtained in 1,401 or 79·2 per cent of the cases as compared with 4·5 per cent in 1918. In 51 or 2·9 per cent the verdict was acquittal as against 4·5 per cent in 1918 whilst in 132 or 6·9 per cent the case was filed, usually either on account of the evidence put forward being considered insufficient to make a conviction probable or because defendant had meanwhile put himself in a position of compliance with the Law and the case did not call for further action. In 1918, 2·6 per cent were similarly disposed of.

There were 194 cases or 11·0 per cent waiting disposal at the end of the year as compared with 11·7 per cent in 1918.

Of the fresh prosecutions in 1919, 312 were against the Vidange Regulations, as compared with 520 in 1918 ; 21 were for illegal practice of medicine, as compared with 21 in 1918 ; 286 were for failure to comply with the Vaccination Decree, as against 213 in the previous year ; 5 were contraventions against the Regulations for Fencing of Waste Lands, as against 1 in 1918 ; 61 for failure to comply with the Regulations of January 21, 1911, and Decree No. 3 of 1918 imposing control on passengers and E.L.C. men coming from infected countries, as against 27 in the previous year ; 3 were against the Inhumation and Exhumation of Bodies Regulations ; 260 for offences against the Infectious Diseases Law, as against 18 in 1918 ; 4 were cases of failure to comply with the Pharmacy and Sale of Poisons Law, as compared with 5 in the previous year ; 1 was for transgression of the Assistant Pharmacists Law No. 20 of November 1911 ; 22 for failure to comply with the Regulations of Births and Deaths Decree, as against 19 in 1918 ; 314 were contraventions of the Law and Regulations governing Objectionable, Unhealthy, and Dangerous Establishments, as compared with 265 in 1918 ; 60 were general sanitary offences dealt with under various articles of the Native and Mixed Penal Codes, as compared with 233 in 1918 ; 2 were offences against the *Arrêté* of June 7, 1913, regarding cleanliness of streets, as against 5 in 1918 ; 3 for selling deteriorated meat ; 179 were prosecutions for adulteration of milk, as compared with 279 in the previous year.

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# X.—UNHEALTHY, INCONVENIENT, AND DANGEROUS ESTABLISHMENTS.

Under the Law of August 28, 1914, and the *Arrêté* of the Ministry of Interior of August 29 of the same year, 1,511 establishments coming under the control of this Office were licensed during 1919, after compliance with the working conditions laid down by this Inspectorate and verified by inspection.

In 1917 and 1918, the numbers were 1,653 and 1,511 respectively.

Of the 1,511 establishments dealt with, 97 were establishments coming under class I of the schedule attached to the law as against 50 in 1918, 1,185 were establishments in class II as compared with 933 in 1918, and 229 in class III as compared with 528 in 1918.

Subjoined is a detailed list of the various establishments in each class licensed during 1919:—

## Class I.

Macaroni factory ... ..	1
Soap factories ... ..	3
Forges employing mechanical power ... ..	5
Distillery ... ..	1
Sweetmeat factories ... ..	8
Public bath ... ..	1
Foundries employing mechanical power ... ..	1
Preserved meat factory ... ..	1
Beer-bottling establishment... ..	1
Garage employing mechanical power ... ..	1
Dairies (for sale or handling of milk) ... ..	12
Bakeries for trade purposes or for the use of the public ... ..	36
Peas and ground nuts, etc., roasting establishments ... ..	12
Starch factory ... ..	1
Ice cream factory ... ..	1
Pastry and alimentary paste factories ... ..	12
<b>TOTAL Class I establishments licensed in 1919 ... ..</b>	<b>97</b>

## Class II.

Corn mills for trade purposes or for the use of the public... ..	5
Pig sties ... ..	5
Grocery shops ... ..	533
Tinsmiths' shops ... ..	49
Flour stores ... ..	97
Blacksmiths' shops ... ..	41
Public kitchens ... ..	23
Butter shops ... ..	3
Copper foundries ... ..	19
Public stables ... ..	17
Dye shops ... ..	4
Skin store ... ..	1
Motor garages ... ..	2
Manufacture of beverages other than aerated waters and alcoholic or fermented drinks ... ..	11
Bone store ... ..	1
Retail oil shops (for the sale of vegetable oils) ... ..	9
Foundries ... ..	9
<i>Fessîkh</i> stores ... ..	2
Cattle sheds ... ..	5
Oil mills ... ..	3
Marble workshop ... ..	1
Gypsum mill ... ..	1
Skin dye shop ... ..	1
<i>Homra</i> (brick crushing) mill... ..	1
Frying and roasting establishments (meat, fish, <i>ta'mia</i> , etc.) ... ..	317
Retail <i>fessîkh</i> establishments ... ..	17
Wool beating establishments ... ..	5
Mills for grinding grains and husks for trade purposes or for the use of the public when worked by mechanical or by hand force ... ..	3
<b>TOTAL Class II establishments licensed in 1919 ... ..</b>	<b>1,185</b>

Class III.

Shops and depots for the sale of domestic birds and game of all descriptions...	18
Clothes ironing establishments ... ..	17
Butchers' shops ... ..	76
Cement and gypsum stores ... ..	16
Fresh fish shops ... ..	2
TOTAL Class III establishments licensed in 1919 ... ..	229

The small staff provided in 1914 for inspection of establishments already licensed has since then been diminished by one, this latter being now employed in the Epidemic Section. 10,553 inspections were made in 1919 as compared with 9,436 in 1918. As the number of "foodstuff" establishments in Cairo is about 7,000, it will be seen that not more than one visit per annum can be paid to the majority with the existing staff, assuming, of course, that the maximum amount of work is being performed by them. As they are only three in number, of whom one is occupied in taking milk samples, we may assume that this is the case. Such rare visits can have but a limited effect in maintaining the desired standard of sanitation. It is hoped that the staff may be increased in number next year. The strength of staff to be aimed at is one overseer for each of the fifteen districts of Cairo and two additional men whose work would consist particularly in taking samples of milk and other foodstuffs most subject to adulteration and in the inspection of foodstuffs that have become unfit for human consumption.

The control of the work of these men out of doors is entrusted to an Inspector with extensive experience in this country.

When the desired increase in staff has been obtained the services of an additional inspector will be required.

The typhus epidemic which occurred in the summer months of 1919 necessitated the withdrawal from this section of the majority of the overseers who were sent to different qisms to assist the Medical Officers in the precautionary measures taken to combat the epidemic (*vide* Table XXV, months of April, May, June, July, and August).

In spite of this, and of the fact that the number of the overseers staff was the same as in 1918, the number of inspection visits was nearly ten per cent higher.

In the course of 10,553 visits paid in 1919, the sanitary conditions were found to be satisfactory in 9,964, or in 94·3 per cent of the inspections, as compared with 89·8 per cent in 1918.

The figures for the last year thus show an improvement, the percentage of visits at which unsatisfactory conditions were found having diminished from 10·2 to 5·5 per cent

TABLE XXIII.—RELATIVE OCCURRENCE OF FAULTY CONDITIONS IN FOODSTUFF ESTABLISHMENTS INSPECTED IN 1918 AND 1919.

NATURE OF ESTABLISHMENT.	Percentage of Visits in which Faulty Conditions were found.	
	1918	1919
	Per Cent.	Per Cent.
Grocers' shops ... ..	1·1	1·2
Butchers' shops ... ..	0·5	0·2
Bakeries ... ..	24·7	13·3
Restaurants and public kitchens ... ..	4·9	5·4
Confectionery establishments ... ..	17·3	22·4
Oilmen's shops ... ..	3·8	2·5
Poulterers' shops ... ..	3·0	1·8
Dairies and milk shops... ..	29·7	31·8
Vegetable dealers' shops ... ..	2·3	1·1
Fish shops ... ..	10·7	2·5
Other establishments ... ..	29·6	13·8
General Percentage ... ..	10·2	5·5



Table XXIII shows the relative occurrence of faulty conditions discovered at the inspections of the various food establishments in 1919 and 1918. From this it will be seen that the general improvement in the conditions found applied to most of the establishments. In the case of the three exceptions, *viz.* dairies and milk shops, confectionery establishments, and public kitchens, the slight increase in the percentage of inspections in which faulty conditions were found in 1919 as compared with those of 1918 was probably due to the greater stringency with which inspections were made.

The inspections of the various districts were distributed as follows :—

965 Mûsky, 1,660 Bâb el Sha'riya, 1,184 Ezbekiya, 582 'Abdîn, 923 Saiyeda Zeinab, 631 Khalîfa, 23 Darb el Ahmar, 1,255 Gamâliya, 1,847 Shubra, 388 Bûlâq I, 332 Bûlâq II, 134 Old Cairo, and 629 Wâyli.

In Table XXIV is shown the number and results of inspections in various districts of the City.

TABLE XXIV.—RESULT OF INSPECTIONS DURING 1919.

DISTRICT.	Total Number of Inspections.	Number showing Satisfactory Conditions.	Percentage of Satisfactory Conditions.	Number showing Unsatisfactory Conditions.	Percentage Unsatisfactory Conditions.
			Per Cent.		Per Cent.
Mûsky ... ..	965	919	95·2	46	4·7
Bâb el Shar'iya ... ..	1,660	1,541	92·8	119	7·1
Ezbekiya ... ..	1,184	1,132	95·6	52	4·3
'Abdîn ... ..	582	546	93·8	36	6·1
Saiyeda Zeinab ... ..	923	856	92·7	67	7·2
Khalîfa ... ..	631	606	96·0	25	3·9
Darb el Ahmar ... ..	23	23	100·0	nil	nil
Gamâliya ... ..	1,255	1,109	88·2	146	11·6
Shûbra ... ..	1,847	1,801	97·5	46	2·4
Bûlâq I ... ..	388	378	97·4	10	2·5
Bûlâq II ... ..	332	321	96·7	11	3·3
Old Cairo ... ..	134	129	96·2	5	3·7
'Abbâsiya ... ..	629	603	95·8	26	4·1
TOTAL ... ..	10,553	9,964	94·3	589	5·5

In Table XXV are shown the monthly distribution of work and the results of the inspections in the various establishments.

As before stated, dairies, confectionery establishments and bakeries gave the most frequent cause for complaint. In the greater number of these cases, objection was taken to the arrangements in force for the removal of smoke and to the infrequency with which the walls were being whitewashed. The most satisfactory establishments were found to be butcher's shops, grocers' shops, and greengrocers' shops.

Table XXVI shows that the number of milk samples taken was 838, of these 179 were found adulterated and 659 genuine.

Table XXVII shows that the number of samples of aerated waters taken was 216. Of these 14 only were found to contain lactose fermentation organisms in 10 c.c. Establishments the samples from which gave unsatisfactory results were reinspected, the conditions of the licences verified, and a time limit was given to make good any deficiencies. Failure to comply was followed by legal proceedings. At the same time the floors of such factories, the water tanks where bottles are soaked, and the storage water tanks were rewashed with boiling water under the supervision of an overseer. In nearly all cases these measures gave the most satisfactory results.

TABLE XXV.—OBJECTIONABLE, UNHEALTHY, AND DANGEROUS ESTABLISHMENTS PREVIOUSLY EXISTING INSPECTED IN 1919.

NATURE OF ESTABLISHMENT.	JANUARY.		FEBRUARY.		MARCH.		APRIL.		MAY.		JUNE.		JULY.		AUGUST.		SEPTEMBER.		OCTOBER.		NOVEMBER.		DECEMBER.		TOTAL.		PER CENT.	
	Conditions Satisfactory.	Conditions Faulty.	Conditions Satisfactory.	Conditions Faulty.	Conditions Satisfactory.	Conditions Faulty.	Conditions Satisfactory.	Conditions Faulty.	Conditions Satisfactory.	Conditions Faulty.	Conditions Satisfactory.	Conditions Faulty.	Conditions Satisfactory.	Conditions Faulty.	Conditions Satisfactory.	Conditions Faulty.	Conditions Satisfactory.	Conditions Faulty.	Conditions Satisfactory.	Conditions Faulty.	Conditions Satisfactory.	Conditions Faulty.	Conditions Satisfactory.	Conditions Faulty.	Conditions Satisfactory.	Conditions Faulty.	Conditions Satisfactory.	Conditions Faulty.
Grocers' shops ...	418	—	442	6	287	1	197	2	228	3	7	—	—	1	74	—	599	5	270	10	281	7	234	2	3,046	37	98.7	1.2
Butchers' shops ...	349	—	291	1	290	2	187	—	340	1	105	—	247	—	156	—	362	4	141	—	223	6	56	3	2,747	17	99.3	0.2
Bakeries ...	21	2	32	13	42	9	20	1	41	3	—	—	—	—	—	—	240	7	37	17	37	17	29	8	499	77	86.6	13.3
Restaurants with public kitchen...	52	3	57	8	69	4	122	4	65	4	6	—	4	—	22	—	262	6	119	13	153	14	137	8	1,068	62	94.5	5.4
Confectionery establishments...	19	—	22	3	13	—	11	3	9	1	—	17	51	17	10	—	36	2	9	6	21	10	6	1	207	60	77.5	22.4
Oilmen's shops ...	48	—	54	1	47	—	14	—	45	—	—	—	—	—	—	—	45	2	24	3	38	3	33	—	348	9	97.4	2.5
Poulterers' shops...	6	—	8	—	9	—	4	—	5	—	—	—	—	—	—	—	34	—	12	—	23	2	8	—	109	2	98.2	1.8
Dairies and milk shops ...	14	—	18	8	17	7	6	—	4	7	—	—	—	—	—	—	40	39	14	4	20	1	19	3	152	71	68.1	31.8
Vegetable dealers' shops ...	21	—	3	—	9	—	9	—	6	—	2	—	—	—	15	—	4	—	13	1	—	—	—	—	82	1	98.8	1.1
Fish shops ...	8	—	18	—	17	—	6	—	14	—	—	—	19	—	8	—	15	1	16	—	27	3	10	—	151	4	97.4	2.5
Other establishments ...	141	25	234	47	137	37	94	7	169	41	8	12	22	2	28	3	245	13	149	41	234	15	94	3	1,555	249	86.2	13.8
TOTAL ...	1,097	30	1,179	87	937	60	670	17	926	63	128	29	336	20	313	3	3,182	79	804	95	1,057	78	635	28	9,964	589	94.3	5.5



TABLE XXVI.—MILK SAMPLES TAKEN DURING 1919.

DISTRICTS.				January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	TOTAL.
Bûlâq	...	...	{ Genuine ... Adulterated...	7 7	10 —	11 5	5 2	16 —	8 1	— —	— —	— —	— —	— —	— —	57 15
Gamâliya	...	...	{ Genuine ... Adulterated...	6 2	2 1	— —	— —	3 —	3 3	1 —	— —	— —	2 4	— 2	— —	17 12
Abbâsiya	...	...	{ Genuine ... Adulterated...	9 6	9 1	6 —	— —	10 1	5 —	5 1	— —	2 —	2 3	1 —	6 4	55 16
Bûlâq	...	...	{ Genuine ... Adulterated...	8 —	3 —	— —	— —	— —	3 —	6 —	— —	— —	— —	— —	— —	20 —
Khalîfa	...	...	{ Genuine ... Adulterated...	10 —	5 3	5 —	2 —	8 —	3 —	2 —	— —	— —	— —	— —	— —	35 3
Ezbekîya	...	...	{ Genuine ... Adulterated...	3 6	16 3	13 3	— —	8 —	2 2	— 7	— —	— —	— —	1 1	1 4	44 26
Abdîn	...	...	{ Genuine ... Adulterated...	5 —	7 1	3 —	— —	3 1	9 —	— —	— —	— —	— —	4 3	3 5	34 10
Shubra	...	...	{ Genuine ... Adulterated...	8 2	10 2	10 1	2 —	6 —	6 2	5 —	— 1	— —	1 4	2 1	2 —	52 13
Darb el Ahmar	...		{ Genuine ... Adulterated...	2 —	9 1	3 —	— —	7 —	2 1	— —	— —	— —	6 —	1 1	3 2	33 5
Mûsky	...	...	{ Genuine ... Adulterated...	12 4	13 2	12 2	5 —	8 5	10 —	3 3	— —	— —	— —	— —	— —	63 16
Bâb el Shariya	...		{ Genuine ... Adulterated...	2 3	4 1	7 3	— —	3 1	4 —	5 1	— —	— —	— —	— —	2 —	27 9
Saiyeda Zeinab	...		{ Genuine ... Adulterated...	13 3	10 —	16 2	10 —	15 2	6 —	2 —	— —	— —	6 5	5 4	5 5	88 21
Old Cairo	...	...	{ Genuine ... Adulterated...	10 1	12 1	6 —	1 —	6 —	8 1	5 1	— —	— —	— —	— —	— —	48 4
Zeitûn	...	...	{ Genuine ... Adulterated...	7 3	8 3	6 4	4 1	17 1	7 3	2 —	— —	— —	3 3	2 3	— —	56 21
Helwân	...	...	{ Genuine ... Adulterated...	— —	— —	8 1	— —	— —	— —	— —	— —	— —	7 2	9 1	7 3	31 7
TOTAL... { Genuine ... Adulterated...				102 37	118 19	106 21	29 3	110 11	76 13	36 13	— 1	2 —	27 21	25 16	29 23	660 178
GRAND TOTAL ...				139	137	127	32	121	89	49	1	2	48	41	52	838

TABLE XXVII.—RESULT OF THE CHEMICAL AND BACTERIOLOGICAL EXAMINATION OF SAMPLES OF AERATED WATERS DURING 1919.

MONTH.	Total number of Samples examined.	Number of Samples in which the Number of Lactose Fermentation Organisms found in 10 c.c.			
		Was none.	Was below 5.	Was between 5-10.	Exceeded 10.
January ... ..	30	29	Nil.	Nil.	1
February ... ..	21	21	"	"	Nil.
March ... ..	24	23	"	1	"
April ... ..	12	12	"	Nil.	"
May ... ..	20	20	"	"	"
June ... ..	24	24	"	"	"
July ... ..	24	22	"	1	1
August ... ..	8	5	3	Nil.	Nil.
September ... ..	10	6	Nil.	"	4
October... ..	19	17	"	"	2
November ... ..	11	10	"	"	1
December ... ..	13	13	"	"	Nil.
TOTAL ... ..	216	202	3	2	9



## XI.—THE ANTI-MOSQUITO SERVICE.

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The work carried out against mosquitoes in 1919 remained the same as in 1918 ; that is, the measures taken for the prevention of mosquito breeding were applied only in certain selected areas and quarters in which a sufficient number of inhabitants had agreed to grant access to their houses for the purpose of dealing with any breeding places.

The absence of an anti-mosquito law and the fact that no measures can be taken except those agreed to by the tenants and proprietors of houses and other buildings results in a condition of affairs that restricts very greatly the utility of the work, for the existence of a few untreated houses and gardens in any area dealt with may be sufficient to give rise to large numbers of mosquitoes that will infect the whole area. The application therefore of such measures in any locality is not likely to be followed by disappearance, but merely by reduction in the numbers of mosquitoes, and even then the reduction will become apparent only in those cases where the area treated is sufficiently separated from surrounding areas and does not contain a large number of untreated houses.

No great improvement is likely to occur until the onus of prevention of mosquito breeding is legally placed upon the occupiers or owners of the premises, in other words the law (Anti-Malarial Legislation) which has been drafted by the Anti-Malarial Commission is put into force.

The number of complaints received in 1919 was insignificant owing to the following reasons :—

(i) The Nile flood was below the normal.

(ii) Most of the excavations and low-lying grounds in Cairo City, especially at Shubra, Bûlâq, and Sakakîni, which used to become flooded during high Nile, have been filled in.

(iii) The drainage work which was carried out by the Main Drainage Department on Gezîra was nearly completed and consequently the soil was comparatively dry.

(iv) Most of the houses in the treated areas in Cairo had their cesspits abolished and their drains were connected with the City drainage system.

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## XII.—PASSENGER AND PILGRIM CONTROL SERVICES.

### (a) PASSENGER SERVICE.

During 1919 the number of passengers arriving in Cairo and who were required to undergo a period of observation, because they had come from countries under suspicion of being infected, was 4,288 (Table XXVIII).

Although this shows a slight increase on the preceding four years not counting 1918, when the number was only 952, still the number is far below the total of passengers requiring observation before the war.

This decrease is explained by the difficulties in obtaining passages owing to the scarcity of ships.

The bulk of the passengers came from Syrian ports (1,987 or 64·0 per cent) and Greece (1,092 or 25·5 per cent).

Of the remaining 1,209 controlled passengers, 441 hailed from Turkish ports, 472 from the Persian Gulf and Red Sea ports, 181 from Corfu, 1 from Crete, 2 from Odessa, and 112 from ports further east.

2,775 passengers or 64·7 per cent landed at Alexandria, 1,041 or 24·3 per cent at Port Said, and 472 or 11·0 per cent at Suez.

Out of the 4,288 arrivals, 3,633 or 84·7 per cent completed the full period of the observation required, 94 or 2·2 per cent left Cairo before the completion of the full period, whilst 561 or 13·0 per cent could not be traced through insufficient addresses.

Besides the above, there were 22,822 names belonging to men in the Egyptian Labour Corps coming from the Canal Zone and notified to the Inspectorate for observation (Table XXIX).

Of these 21,040 or 92·2 per cent were traced and 1,782 or 7·8 per cent could not be found.

There were also 527 names of labourers notified to us by the Provincial Medical Officers. Out of these 474 or 89·9 per cent traced and 53 or 10·1 per cent could not be found.

In addition there were 1,423 labourers whose names were not included in any lists received at the Inspectorate or Qisms Health Offices, but who reported themselves to the Qism Medical Officers for observation (Table XXX).

### (b) PILGRIM SERVICE.

During 1919 there were 50 passports for the Hedgaz issued to persons resident in Cairo together with 89 officials accompanying the Mahmal.

All these returned and completed their full period of observation with the exception of one official who did not return.



TABLE XXVIII.—

MONTH.	VIA ALEXANDRIA.														VIA PORT											
	Number of Passengers.	PORT OF ORIGIN.										Observed.	Untraced.	Departed before Full Period of Observation completed.	Number of Passengers.	PORT OF										
		Salonica.	Smyrna.	Constantinople.	Piræus.	Beyrouth.	E. L. C. Syria.	Syria.	Crete.	Corfu.	Bombay.					Beyrouth.	Constantinople.	Aleppo, Alexandretta.	Piræus.	Singapour.	Syria.	Salonica.	Calcutta.	Bombay.	Shanghai.	
January	52	41	6	5	—	—	—	—	—	—	—	43	4	5	46	24	3	5	1	5	7	1	—	—	—	
February	110	—	2	1	107	—	—	—	—	—	—	92	13	5	9	3	—	—	—	2	4	—	—	—	—	
March ...	88	—	—	—	50	36	2	—	—	—	—	81	6	1	22	8	2	—	2	2	—	—	4	3	1	
April ...	68	1	—	—	16	19	20	12	—	—	—	56	12	—	72	55	—	—	1	—	—	—	—	6	—	
May ...	51	—	—	—	—	9	—	41	1	—	—	23	28	—	83	66	—	—	10	—	—	—	—	7	—	
June ...	119	16	8	16	23	22	—	34	—	—	—	107	11	1	31	25	—	—	5	—	—	—	—	1	—	
July ...	357	8	7	8	68	—	—	265	—	1	—	226	122	9	104	102	—	—	2	—	—	—	—	—	—	
August	137	13	11	4	37	—	2	62	—	8	—	127	8	2	92	78	—	—	—	—	—	—	—	—	—	
September	280	6	16	56	93	—	1	93	—	15	—	226	49	5	141	119	—	—	—	—	—	—	21	—		
October	309	24	7	20	73	23	8	97	—	57	—	268	24	17	215	90	—	—	—	—	119	—	—	6	—	
November	625	52	—	100	232	132	5	26	—	49	29	585	35	5	132	17	19	—	—	—	84	—	—	12	—	
December	579	—	24	95	210	99	—	100	—	51	—	545	30	4	94	16	19	—	—	4	42	—	2	4	—	
TOTAL ...	2775	161	81	305	909	340	38	730	1	181	29	2379	342	54	1041	603	43	—	21	13	256	16	6	60	1	

PASSENGER CONTROL.

SAID.									VIA SUEZ.																								
ORIGIN.									PORT OF ORIGIN.																								
Odessa.	Mersina.	Jaffa.	Colombo.	Aden.	Yokohama.	Observed.	Untraced.	Departed before Full Period of Observation completed.	Number of Passengers.	Batavia.	Basra.	Akaba.	Massawah.	Abu Zeneima.	Jeddah.	Port Sudan.	Yambo.	Tor.	Bombay.	Aden.	Hodeida.	Karachi.	Baghdad.	Colombo.	Observed.	Untraced.	Departed before Full Period of Observation completed.						
—	—	—	—	—	—	45	1	—	51	—	2	23	2	15	7	2	—	—	—	—	—	—	—	—	38	12	1						
—	—	—	—	—	—	9	—	—	28	—	1	2	1	7	7	4	2	3	1	—	—	—	—	—	25	3	—						
—	—	—	—	—	—	17	2	3	72	—	—	8	6	12	14	—	16	—	7	4	1	4	—	—	55	16	1						
2	8	—	—	—	—	57	12	3	51	—	3	—	7	5	9	22	—	—	—	3	—	—	2	—	30	18	3						
—	—	—	—	—	—	73	8	2	17	—	—	—	—	2	15	—	—	—	—	—	—	—	—	—	9	7	1						
—	—	—	—	—	—	25	6	—	19	—	—	—	—	11	8	—	—	—	—	—	—	—	—	—	13	6	—						
—	—	—	—	—	—	90	11	3	23	—	—	—	2	9	5	3	—	—	—	2	—	—	—	2	18	3	2						
—	4	10	—	—	—	69	21	2	34	—	2	—	11	6	13	—	—	—	2	—	—	—	—	—	21	13	—						
—	—	—	1	—	—	118	22	1	34	—	—	—	—	—	34	—	—	—	—	—	—	—	—	—	31	3	—						
—	—	—	—	—	—	197	11	7	66	1	4	—	—	24	12	2	—	20	3	—	—	—	—	—	58	5	3						
—	—	—	—	—	—	113	17	2	46	—	—	—	21	6	12	3	—	—	1	—	—	—	3	—	43	2	1						
—	—	5	—	1	1	76	16	2	31	—	—	—	—	13	12	—	—	3	3	—	—	—	—	—	24	4	3						
2	12	15	1	1	1	889	127	25	472	1	12	33	50	110	148	36	18	26	17	9	1	4	5	2	365	92	15						



TABLE XXIX.—YEARLY RECORD OF EGYPTIAN LABOUR CORPS MEN RETURNING TO CAIRO IN 1919.

DISTRICT.	Number recorded on Lists.	Number recorded and observed in Qism.	Number recorded and observed outside Qism.	Number recorded on Lists and not found.	Workmen recorded by M.O. of Mudiriyas.			Workmen not recorded on Lists and came up for Observation.	
					Total.	Observed.	Not found.	Total.	Observed.
‘Abbâsiya ... ..	1,183	1,103	52	28	68	68	—	—	—
‘Abdîn ... ..	2,559	2,346	22	191	100	82	18	—	—
Ezbekiya ... ..	2,413	2,403	—	10	14	14	—	248	248
Bâb el Sha‘riya	1,532	1,523	9	—	—	—	—	31	31
Bûlâq I ... ..	2,632	2,452	13	167	60	60	—	161	161
Bûlâq II ... ..	1,092	1,045	40	7	15	15	—	114	114
Darb el Ahmar...	1,688	1,418	94	176	80	70	10	120	120
Gamâliya ... ..	2,222	2,045	15	162	20	20	—	150	150
Helwân ... ..	377	301	10	66	1	1	—	16	16
Khalîfa ... ..	1,620	1,413	17	160	—	—	—	106	106
Mûsky ... ..	905	855	—	50	—	—	—	109	109
Old Cairo ... ..	730	625	—	105	26	16	10	39	39
Saiyeda Zeinab...	1,040	781	45	214	75	60	15	4	4
Shubra ... ..	1,715	1,429	—	286	—	—	—	316	316
Zeitûn ... ..	1,114	932	22	160	68	68	—	9	9
TOTAL ...	22,822	20,671	369	1,782	527	474	53	1,423	1,423

TABLE XXX.—YEARLY RECORD OF PILGRIMS IN 1919.

DISTRICT.	Pilgrims with Passport issued by the Governorate (1919) and registered in the District Record.	Employees who accompanied Mahmal and were recorded in the District Registered.	Pilgrims and Employees who returned and were absent the usual Period in Cairo.		Pilgrims who did not leave although they had a Passport.	Pilgrims and Employees who were observed outside Cairo and left from Cairo.		Pilgrims who returned to Cairo and were observed but did not take Passport from Cairo.	Pilgrims who were observed in Cairo and left from elsewhere.
			Pilgrims.	Employee.		Pilgrims.	Employee.		
‘Abbâsiya ... ..	11	—	11	—	—	—	—	—	—
‘Abdîn ... ..	4	6	4	6	—	—	—	—	—
Ezbekiya ... ..	1	—	1	—	—	—	—	—	—
Bâb el Sha‘riya	1	12	1	12	—	—	—	2	—
Bûlâq I ... ..	1	2	1	2	—	—	—	—	—
Bûlâq II ... ..	—	—	—	—	—	—	—	—	—
Darb el Ahmar...	6	10	6	10	—	—	—	5	—
Gamâliya ... ..	—	23	—	23	—	—	—	—	4
Helwân ... ..	14	—	14	—	—	—	—	—	—
Khalîfa ... ..	7	6	7	6	—	—	—	—	—
Mûsky ... ..	—	—	—	—	—	—	—	—	—
Old Cairo ... ..	—	—	—	—	—	—	—	—	—
Saiyeda Zeinab...	2	30	2	29	1	—	—	—	—
Shubra ... ..	—	—	—	—	—	—	—	—	—
Zeitûn ... ..	3	—	3	—	—	—	—	—	—
TOTAL ...	50	89	50	88	1	—	—	7	4

### XIII.—SANITARY CONTROL OF PUBLIC WOMEN.

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#### (a) EXAMINATION ROOMS FOR NATIVE PROSTITUTES.

*Staff.*—The staff of the examination rooms underwent few alterations during the year.

With the exception of one Assistant M.O., the whole staff attended regularly throughout the political disturbance and strikes which marked the early months of the year, and the work of the examination rooms was carried out as usual.

*Numbers :—*

(a) *Ezbekîya and Bâb el Sha'rîya.*—The numbers show little difference as compared with the previous year. The maximum number of women on the register was 1,349, or 22 more than in 1918. Of these only 982 remained at the end of the year, no less than 367 having been struck off by the Police as having left the District, being over age, etc.

The total number of examinations held was 21,829, 3,552 less than in the preceding year. That this falling off is absolute and not proportionate to the diminution in numbers registered is shown by a comparison of the average number of examinations per woman. This was 19·1 in 1918 and only 16·2 in 1919. Even making allowance for the number of weeks spent by any woman in hospital, the figure is an unduly low one.

(b) *Abbâsîya.*—The number of women registered in this district was smaller than in the previous year, and the examinations held and the average attendance were both less. A recent examination of the register showed that rather more than sixty per cent of the women are habitual absentees. The average attendance, 13·5, is very unsatisfactory.

(c) *Saiyeda Zeinab.*—In this district the unsatisfactory attendance noted above is even more marked, the average attendance per woman being only 11·2. The maximum number on the register, 101, was unusually high, but only 60 remained at the end of the year.

Table XXXI shows the results of the examinations during 1918 and 1919.

*Diseases.*—The figures dealing with disease show a decrease in proportion to the diminished attendance (Table XXXII).

All cases of syphilis amounted to 194 or 38 less than in the previous year. The decrease is only relative, the average incidence being practically the same as in 1918.

There were 2,497 cases of gonorrhœa, acute and chronic, nearly 1,000 less than in the previous year, there being thus an actual decrease. In part at least this is attributable to more accurate diagnostic methods, for the purely clinical diagnosis of gonorrhœa hitherto relied on has been replaced by microscopic examination in nearly all cases. One result of this has been to reveal the existence of a large class of cases suffering from what may be termed "treatment urethritis." Such cases show a profuse milky urethral discharge, which on microscoping is found to consist entirely of epithelial cells, both organisms and pus cells being absent. The history shows a recent discharge from hospital. Too frequent instrumentation or the use of over-powerful caustics would cause such a condition, the urethra being left in a highly susceptible state. These cases soon become hospital habitués, and form a good illustration of the interdependence of hospital and examination rooms for indications regarding treatment and its after-effects as gathered from clinical observations.

The dictum recently uttered by a prominent authority on venereal diseases, that no more than fifteen per cent of cases of chronic and subacute gonorrhœa show the presence of the gonococcus, is abundantly supported by the microscopical findings at the examination room. Gonococci are found in practically every case of acute gonorrhœa, while their presence in the others is exceptional, and no reliance is to be placed on their absence.



TABLE XXXI.—RESULTS OF EXAMINATIONS OF REGISTERED NATIVE WOMEN.

District.	1918.								1919.								
	Number of Women on Register.	Number of Women struck off during the Year.	Number of Women remaining on Registers at End of the Year.	Number of Examinations held.	Average Number of Examinations per Woman.	Number of Cases of Disease sent to Hospital.	Number of Cases of Disease discovered.	Percentage of Examinations exposing Diseased Conditions.	Per Cent.	Number of Women on Register.	Number of Women struck off during the Year.	Number of Women remaining on Registers at End of the Year.	Number of Examinations held.	Average Number of Examinations per Woman.	Number of Cases of Disease sent to Hospital.	Number of Cases of Disease discovered.	Percentage of Examinations exposing Diseased Conditions.
Báb el Sha'riya and Ezbekiya ... ..	1,327	520	1,007	25,381	19.1	3,371	3,420	13.5		1,349	367	982	21,829	16.2	2,459	2,495	11.3
'Abbásiya ... ..	171	60	111	2,614	15.3	253	256	9.8		151	38	113	2,019	35.5	166	168	8.3
Saiyeda Zeinab ... ..	75	4	71	1,252	16.7	118	118	9.4		101	41	60	1,132	11.2	120	125	11.0
TOTALS ... ..	1,573	384	1,189	29,247	18.6	3,742	3,794	13		1,601	446	1,155	24,980	15.6	2,745	2,788	11.2

For practical purposes the presence of pus cells in urethral discharge is taken as an indication of infectivity. In those cases where pus cells occur without any organism at all, the diagnosis of gonorrhœa can be made with considerable certainty. The presence of other organisms rather complicates the problem, but the circumstances render it highly probable that such are cases of secondary infection supervening on gonorrhœa, and not of non-infective urethritis due entirely to other organisms.

Cervicitis is relatively infrequent, about one in ten of all cases.

This is explained by the greater accessibility of the cervix uteri to self-cleansing. A number of cases sent to hospital as urethritis are found there to have cervicitis as well.

TABLE XXXII.—VENEREAL DISEASE DISCOVERED AMONG NATIVE REGISTERED WOMEN.

DISEASE.		1918				1919			
		Bâb el Sha'riya and Ezbekiya.	ʿAbbâsiya.	Saiyeda Zeinab.	TOTAL.	Bâb el Sha'riya and Ezbekiya.	ʿAbbasiya.	Saiyeda Zeinab.	TOTAL.
Syphilis ...	{ Primary ...	84	6	1	—	77	2	2	—
	{ Secondary ...	129	5	6	—	102	6	5	—
	{ Tertiary ...	1	—	—	—	—	—	—	—
Total Syphilis ...		214	11	7	232	179	8	7	194
Gonorrhœa {	Acute ...	242	6	2	—	307	4	3	—
	Chronic ...	2,796	224	102	—	1,929	147	107	—
Total Gonorrhœa ...		3,138	230	104	3,472	2,236	151	110	3,497
Chancroid ... ..		68	15	7	90	80	9	8	97
TOTALS ... ..		3,420	256	118	3,794	2,492	156	125	2,788

The total of all cases admitted to hospital was 2,788 and the percentage of examinations revealing disease 11·2 as against 13·0 in the previous year. How far this diminution can be attributed to an actually diminished incidence of venereal diseases among prostitutes is very doubtful. There is no doubt that most of the women have learnt to use the douche and other preventive measures. But whether such are used merely to mislead the examining Medical Officer, or as a routine precaution, is an open question.

The actual number of women diseased in each area was :—

Bâb el Sha'riya	...	...	...	...	...	...	...	...	...	945
'Abbâsiya	...	...	...	...	...	...	...	...	...	79
Saiyeda Zeinab	...	...	...	...	...	...	...	...	...	74

'Abbâsiya and Saiyeda Zeinab.—The examinations at these two centres are at present carried on under most unfavourable conditions. The buildings used are not easily accessible, in a semi-ruinous condition, and quite unsuited for the work. The accommodation is inadequate, and for this reason neither the matron nor any of the female staff can be present.

The sterilization of instruments, etc., has to be carried out in the crudest manner and the need for more suitable quarters is very urgent. The numbers at both places are small and diminishing.

Unregistered Women.—The total of unregistered women sent for examination by the Police was 1,258 and of these 99 were under the legal age of 18 years.



The incidence of disease was as follows :—

Acute gonorrhœa	...	...	...	...	...	...	...	...	...	...	...	...	...	...	143		
Chronic gonorrhœa	...	...	...	...	...	...	...	...	...	...	...	...	...	...	357		
Primary syphilis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	41		
Secondary syphilis	...	...	...	...	...	...	...	...	...	...	...	...	...	...	82		
Chancroid	...	...	...	...	...	...	...	...	...	...	...	...	...	...	23		
TOTAL														...	...	...	646

(b) EUROPEAN EXAMINATION ROOMS.

*Numbers.*—At the beginning of the year 1919 there were 392 women on the register, as compared with 363 at the beginning of 1918. During 1919, 45 women were added to the register and 90 women were struck off for various reasons such as death, prolonged absence, leaving the district, etc. The total number of women on the register during the year was 437, and the number remaining on December 31 was 347.

The total number of examinations held was 15,826 which makes the average number of examinations per woman 36·2. In the previous year this number was 39·3. The slight falling off in attendance may be attributed in part to the fact that the Police during the spring were so much occupied with City disturbances, and also in part to the hatred the women have of being admitted repeatedly to hospital. Many, probably the majority of these women, at the time of hospitalization, feel little inconvenience from their malady.

Confinement in any hospital, to a person who does not feel himself to be ill, is extremely irksome. Where less freedom can be given than in an ordinary hospital, the confinement becomes more irksome still. The result is that a woman, who has once been an in-patient at the Lock Hospital, generally tends to become a habitual absentee from the examination and especially will she do her best to avoid the examination if she has anything the matter with her. This latter fact explains abundantly the very low percentage of examinations which reveal disease.

The percentage of examinations revealing disease in 1919 was only 2·22 as compared with 2·6 per cent in 1918. During the year it was realized that this figure could not represent accurately the percentage of diseased women, so the police were requested to give increased assistance, and every possible endeavour was made at the examination rooms to prevent the women from doing various things calculated by them to render detection of disease difficult, with the result that in the month of December the percentage of examinations revealing diseased conditions had risen to over 5.

Even then, however, one was faced with great difficulties. Women persist in having themselves cleaned before inspection, and some of them are so slightly and so chronically diseased that detection in the two hours that one can conveniently keep them waiting is almost impossible. It is encouraging, however, to realize that such slight cases, provided they perform an average number of douches and lavages in their houses, are probably only infective to a very slight degree.

Table XXXIII shows the result of the examinations of the registered European women.

TABLE XXXIII.—RESULTS OF EXAMINATIONS OF REGISTERED EUROPEAN WOMEN  
IN 1917, 1918, AND 1919.

YEAR.	Number of Women registered during the Year.	Total Number of Examinations held.	Average Number of Examinations per Woman.	Number of Cases of Disease discovered.	Percentage of Examinations exposing Diseased Condition.  Per Cent.
1917 ... ..	519	16,372	31·5	329	2·0
1918 ... ..	440	17,275	39·3	450	2·6
1919 ... ..	437	15,826	36·2	351	2·22

(c) EUROPEAN LOCK HOSPITAL.

During 1919 there were 389 European prostitutes admitted to the hospital for various venereal diseases as against 450 in 1918.

There were 11 cases of syphilis, 4 of which were primary and 7 secondary, as compared with 25 cases in 1918.

There were 332 women treated for gonorrhœa as against 357 in 1918. Of these 26 were acute and sub-acute whilst 306 were chronic.

There were also 8 cases of chancroids as against 12 in 1918. The remaining 38 patients were admitted under observation but proved to be free from venereal disease.

The average number of days that patients remained in hospital under treatment, or observation, for the various diseases was 17·1. For the syphilis cases the average period of detention for all cases was 26·8 days, that for primary cases being 31·2 days and for the secondary cases 18 days.

The average number of days in hospital for women suffering from gonorrhœa was 18·3, sub-acute cases remaining on an average 23·5 days, and chronic cases 17·9 days.

For cases of chancroid 17·7 days was the average period of detention.

In Table XXXIV are shown the details of the admissions during 1918 and 1919.

An interesting point, however, has been observed, in the fact that reported unregistered women are practically the only class which is admitted for "labial abscess." From this it can be inferred that routine careful examination tends to give a woman more chance to avoid undesirable complications of her original trouble.



TABLE XXXIV.—EUROPEAN HOSPITAL FOR WOMEN. NUMBER OF PATIENTS AND PERIOD OF DETENTION FOR THE DIFFERENT DISEASES.

DISEASE.	1918.					1919.					
	Total Number of Patients admitted during the Year.	Number of Patients remaining in Hospital at the End of the Year.	Total Number of Patients admitted and discharged during the Year.	Total Number of Days in Hospital of Patients admitted and discharged during the Year.	Average Number of Days in Hospital of Patients admitted and discharged during the Year.	Total Number of Patients admitted during the Year.	Number of Patients remaining in Hospital at the End of the Year	Total Number of Patients admitted and discharged during the Year.	Total Number of Days in Hospital of Patients admitted and discharged during the Year.	Average Number of Days in Hospital of Patients admitted and discharged during the Year.	
Syphilis	Primary ... ..	9	—	9	341	37·9	4	—	4	125	31·2
	Secondary ... ..	15	—	15	410	27·3	7	5	2	36	18·0
	Tertiary ... ..	1	—	1	22	22·0	—	—	—	—	—
	Total Syphilis ... ..	25	—	25	773	30·9	11	5	6	161	26·8
Gonorrhœa...	Acute ... ..	75	9	66	1,634	24·8	1	1	—	—	—
	Sub-acute ... ..	—	—	—	—	—	25	—	25	587	23·5
	Chronic ... ..	282	7	275	5,347	19·4	306	24	282	5,044	17·9
	Total Gonorrhœa ... ..	357	16	341	6,981	20·5	332	25	307	5,631	18·3
Chancroid ... ..	12	1	11	166	15·1	8	—	8	142	17·7	
Under Observation ... ..	56	—	56	277	4·9	38	—	38	211	5·5	
TOTALS ... ..	450	17	433	8,197	18·9	389	30	359	6,145	17·1	

### XIII.—MISCELLANEOUS.

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#### (a) PERMITS FOR TRANSPORT OF DEAD BODIES.

During 1919 there were 227 permits granted as compared with 255 in 1918.

Of the 227 permits given in 1919, 3 were for bodies to be embalmed and removed abroad, 63 were for exhumation and transference from one cemetery to another in Cairo, 119 for the removal from Cairo to other cemeteries in the country of bodies either of persons recently deceased or after exhumation, 42 for bodies outside and accepted for burial in Cairo.

#### (b) COMPLAINTS REGARDING HEALTH MATTERS.

In 1919 there were 886 complaints received as against 505 in 1918.

Of these complaints 872 were justified and action taken whilst in 14 no action was taken either on account of the complaint being unjustified or as a result of an absence of any power to deal with the condition complained of.

#### (c) FENCING OF WASTE LANDS.

In view of the continued rise in the cost of material and other circumstances resulting from the war conditions, it has not been considered advisable in 1919 to enforce the law regulating the fencing of waste land with too great stringency.

However, in 41 cases the matter was considered of sufficient urgency to call for action as compared with 18 in the previous year.

#### (d) MOSQUES.

During 1919, 77 mosques were examined as to their sanitary condition and the sanitary measures necessary recommended, as against 79 in 1918.

#### (e) SICK EMPLOYEES EXAMINED BY THE DISTRICT MEDICAL OFFICERS.

On behalf of the Medical Commission or at the request of various Government Departments 1,469 sick employees were examined by the District Medical Officers in 1919 as compared with 1,662 in 1918.

#### (f) VIDANGE.

Vidange notices were served upon the proprietors of 7,080 houses in 1919, as against 7,729 in 1918.

The notice was complied with in 6,692 cases. Legal action being called for in 288 or 4 per cent of the cases as compared with percentages calling for legal enforcement of 6·5 per cent in 1918.

#### (g) WEATHER REPORT.

Appended are the tables of the weekly weather state for Cairo City for 1919 compiled from the Meteorological statements issued by the Physical Service of the Ministry of Public Works.

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APPENDIX A.—CAIRO CITY WEEKLY WEATHER STATE FOR 1919.

(From the reports issued by the Physical Service, Ministry of Public Works.)

Number of Week.	Week.	TEMPERATURE (°C.).						HUMIDITY PER CENT.		RAINFALL m.m.		SUNSHINE (Hours).		CLOUD.		WIND.		NILE GAUGE.	
		Maximum.	Difference from Normal.	Minimum.	Difference from Normal.	Mean.	Difference from Normal.	Mean.	Difference from Normal.	Weekly Total.	Difference from Normal.	Mean.	Per Cent of Possible.	0—10.	Difference from Normal.	Force.	Direction.	Mean.	Difference from Normal.
1	January 1-7	20.4	+1.4	8.9	+1.9	14.1	+1.5	86	+14	2.3	+0.9	6.9	67	3.1	-1.2	3	W	15.17	-0.03
2	" 8-14	20.1	+1.5	9.3	+2.1	13.1	+0.7	79	+7	0.5	-1.1	7.1	69	3.1	-1.3	3	S.W.	15.24	+0.16
3	" 15-21	18.7	+1.4	8.4	+2.4	12.9	+0.9	82	+11	40.1	+38.5	6.1	59	3.9	-0.5	4	S	15.21	+0.26
4	" 22-28	19.0	+1.0	8.1	+2.1	12.4	-0.1	78	+7	0.0	-1.6	8.8	83	1.7	-2.5	3	S	15.15	+0.26
5	" 29-4 February	19.3	+0.5	8.4	+2.0	12.5	-0.5	69	-1	0.0	-1.4	8.7	81	2.6	-1.5	3	S	15.06	+0.05
6	February 5-11	22.3	+2.3	10.2	+2.2	15.4	+2.4	65	-3	0.5	-0.4	6.5	60	4.3	-0.3	4	S	15.12	-0.13
7	" 12-18	22.5	+2.5	10.1	+2.1	14.8	+1.3	69	+2	0.0	-1.0	9.0	81	3.0	+0.9	3	W	15.49	+0.15
8	" 19-25	25.1	+4.1	11.9	+3.9	17.0	+2.9	64	-1	0.0	-1.0	8.9	78	1.6	+2.2	4	S.S.W.	15.10	-0.27
9	" 26-4 March	23.1	+1.6	11.6	+3.1	15.8	+0.8	69	+5	0.0	-0.9	8.8	76	1.7	-2.0	4	S	15.14	-0.27
10	March 5-11	25.7	+3.7	11.1	+2.6	17.4	+1.4	64	+2	2.5	+1.8	8.2	70	4.1	+0.4	3	W	15.46	+0.03
11	" 12-18	29.1	+5.6	12.9	+3.4	19.0	+2.2	66	+4	0.0	-0.7	8.3	70	1.9	-1.7	4	N	18.68	-0.25
12	" 19-25	26.2	+3.2	11.6	+1.6	17.5	-0.3	63	+2	0.0	-0.6	9.1	75	3.8	+0.2	3	N	15.63	-0.27
13	" 29-1 April	31.1	+5.6	13.2	+2.2	20.8	+2.2	60	+1	0.0	-0.8	10.0	81	0.2	+3.4	2	N.E.	15.63	+0.32
14	April 2-8	28.1	+1.1	14.3	+2.8	20.8	+1.3	70	+12	0.0	-0.9	9.8	78	1.0	-2.5	1	N	15.76	+0.49
15	" 9-15	27.2	-0.0	14.4	+2.4	21.0	+0.7	62	+6	0.0	-0.9	7.2	56	1.7	-1.8	2	Var.	15.78	+0.59
16	" 16-22	37.9	-0.6	14.0	+1.0	22.3	+1.0	58	+3	Drops.	-0.9	10.0	77	1.4	+2.0	2	N.N.W.	15.76	+0.53
17	" 23-29	28.9	-1.1	15.0	+1.0	22.9	+0.9	56	+2	0.0	-0.9	10.7	81	1.3	-2.0	2	N	15.74	+0.52
18	" 30-6 May	27.3	-2.7	12.5	-1.5	22.0	-0.9	52	0	0.0	-0.4	9.6	72	2.6	-0.5	2	N	15.70	+0.46
19	May 7-13	28.1	-1.9	15.8	+1.8	22.4	-1.1	59	+8	1.3	+1.1	10.3	77	1.4	-1.6	2	W	15.80	+0.60
20	" 14-20	29.2	-3.8	16.4	+0.4	23.3	-0.7	58	+8	0.0	-0.2	11.2	82	1.7	-1.1	1	Var.	15.81	+0.62
21	" 21-27	30.0	-3.5	17.5	+0.5	24.6	-0.3	56	+6	0.0	-0.2	10.5	79	2.1	-0.3	1	N.W.	15.76	+0.58
22	" 28-3 June	31.4	-2.1	15.5	-1.5	22.1	-3.3	52	+1	0.0	-0.1	11.8	85	0.3	-1.7	1	N.W.	15.79	+0.64

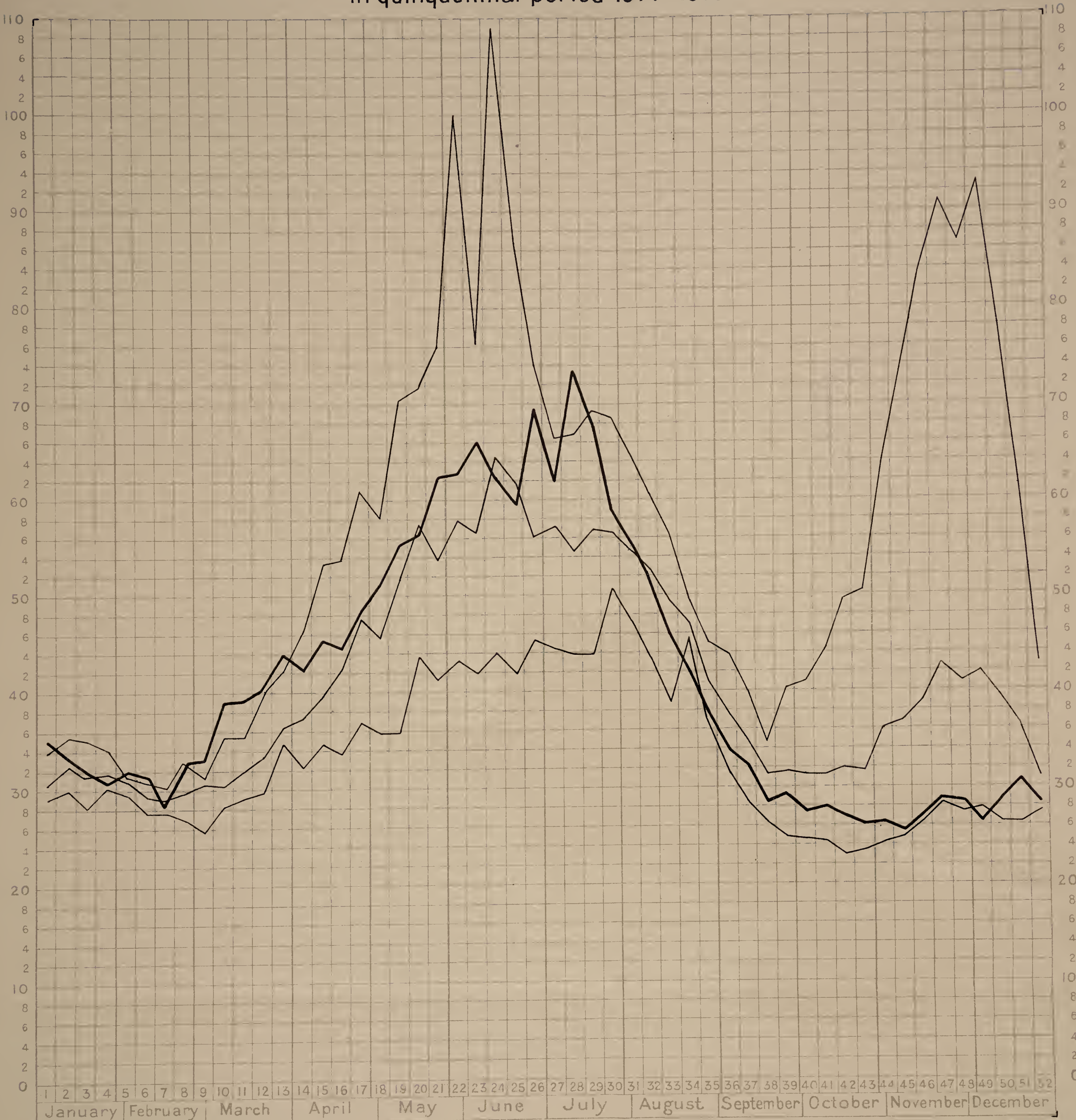
23	June	4-10	...	...	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15·79	—	—	+0·59
24	"	11-17	...	...	...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	15·76	—	—	+0·51
25	"	18-24	...	...	...	33·2	18·4	-0·6	24·3	-2·7	56	+4	0·0	0·0	0·0	0·9	-0·3	2	N	15·82	N	2	+0·55
26	"	25- 1 July	...	...	...	36·7	20·3	+1·3	26·9	-0·5	54	+2	0·0	0·0	0·0	0·0	-1·2	2	N	15·82	N	2	+0·50
27	July	2- 8	...	...	...	36·0	20·2	+0·2	27·0	-0·8	58	+5	0·0	0·0	0·0	0·9	-0·4	1	N	15·78	N	1	+0·39
28	"	9-15	...	...	...	38·7	21·5	+1·5	28·7	+0·7	58	+4	0·0	0·0	0·0	0·4	-0·9	1	N	15·81	N	1	+0·36
29	"	16-22	...	...	...	35·3	21·7	+0·7	27·5	-0·5	59	+4	0·0	0·0	0·0	0·8	-0·6	1	N.E.	—	N.E.	1	—
30	"	23-29	...	...	...	34·7	21·7	+0·2	27·0	-1·0	63	+6	0·0	0·0	0·0	1·1	-0·3	1	N	15·81	N	1	+0·10
31	"	30- 5 August	...	...	...	34·5	21·7	+0·7	27·1	-0·9	65	+6	0·0	0·0	0·0	0·9	-0·6	1	N.W.	15·95	N.W.	1	+0·01
32	August	6-12	...	...	...	33·8	21·9	+0·9	26·6	-1·4	70	+10	0·0	0·0	0·0	1·4	-0·1	2	W	17·51	W	2	+0·11
33	"	13-19	...	...	...	33·7	20·9	-0·1	26·5	-1·5	69	+7	0·0	0·0	0·0	0·7	-0·9	1	N.W.	17·69	N.W.	1	+0·55
34	"	20-26	...	...	...	33·6	21·3	+0·3	26·4	-1·4	69	+5	0·0	0·0	0·0	1·7	+0·1	1	W	17·92	W	1	+0·15
35	"	27- 2 Sept.	...	...	...	32·8	21·4	+1·4	25·6	-1·1	69	+4	0·0	0·0	0·0	2·3	+0·7	1	N.N.W.	17·99	N.N.W.	1	-0·12
36	September	3- 9	...	...	...	31·6	20·4	-0·6	25·1	-1·2	71	+4	0·0	0·0	0·0	0·7	-0·9	3	W.	18·32	W.	3	0·00
37	"	10-16	...	...	...	32·0	20·0	+1·0	25·0	-0·8	76	+8	0·0	0·0	0·0	1·1	-0·5	2	W	18·20	W	2	-0·34
38	"	17-23	...	...	...	32·5	20·3	+1·8	25·6	+0·2	62	-7	0·0	0·0	0·0	0·0	-1·7	2	N	18·36	N	2	-0·30
39	"	24-30	...	...	...	30·4	19·5	+1·0	24·2	+0·1	72	+2	0·0	0·0	0·0	1·0	-0·9	2	N	18·63	N	2	-0·07
40	October	1- 7	...	...	...	29·5	19·1	+1·1	23·1	-0·9	82	+11	0·0	0·0	-0·4	1·1	-1·0	1	N.W.	18·38	N.W.	1	-0·27
41	"	8-14	...	...	...	31·8	18·4	+1·4	23·7	+0·5	75	+4	0·0	0·0	-0·4	1·9	-0·3	2	Var.	18·22	Var.	2	-0·38
42	"	15-21	...	...	...	31·5	18·8	+1·8	24·2	+1·5	75	+3	0·0	0·0	-0·5	1·3	-1·1	2	Var.	18·20	Var.	2	-0·43
43	"	22-28	...	...	...	20·4	19·5	+4·0	23·6	+1·8	71	-1	Drops.	-0·4	-0·4	1·8	-0·8	1	N.E.	17·82	N.E.	1	-0·80
44	"	29- 4 Nov.	...	...	...	32·6	19·9	+3·9	25·2	+4·2	62	-10	0·0	0·0	-0·6	1·4	-1·3	2	N.E.	17·34	N.E.	2	-0·96
45	November	5-11	...	...	...	28·7	15·5	+1·5	20·4	+1·2	81	+8	0·0	0·0	-0·7	1·1	-1·8	2	N.E.	16·95	N.E.	2	-0·87
46	"	12-18	...	...	...	28·0	15·0	+3·0	20·1	+1·2	82	+9	0·0	0·0	-0·7	0·0	-3·1	1	N	16·82	N	1	-0·51
47	"	19-25	...	...	...	20·5	11·7	+0·7	15·0	-2·7	69	-4	0·0	0·0	-0·7	4·1	+0·8	2	N	16·58	N	2	-0·37
48	"	26- 2 Dec.	...	...	...	23·0	11·1	+0·1	15·7	-1·0	83	+10	0·0	0·0	-0·8	2·9	-0·6	2	S	16·22	S	2	-0·43
49	December	3- 9	...	...	...	20·8	11·6	+1·6	15·0	-0·8	77	+4	Drops.	-0·8	-1·1	4·1	+0·3	1	S.W.	16·04	S.W.	1	-0·33
50	"	10-16	...	...	...	18·5	9·3	+0·3	13·0	-1·8	62	-11	0·0	0·0	-1·1	3·9	-0·1	3	S.W.	15·87	S.W.	3	-0·27
51	"	17-23	...	...	...	19·0	10·6	+2·6	13·9	0·0	65	-8	0·1	0·1	-0·1	3·9	-0·3	3	S.W.	15·59	S.W.	3	-0·19
52	"	24-31	...	...	...	18·3	8·8	+0·8	12·4	-0·7	85	+13	Drops.	-1·2	-1·2	3·6	-0·7	1	S.E.	14·75	S.E.	1	-0·64



Govt. Press 8770-1920-250 ex.



Cairo City weekly death-rates per 1000 Living  
in quinquennial period 1914-1918.



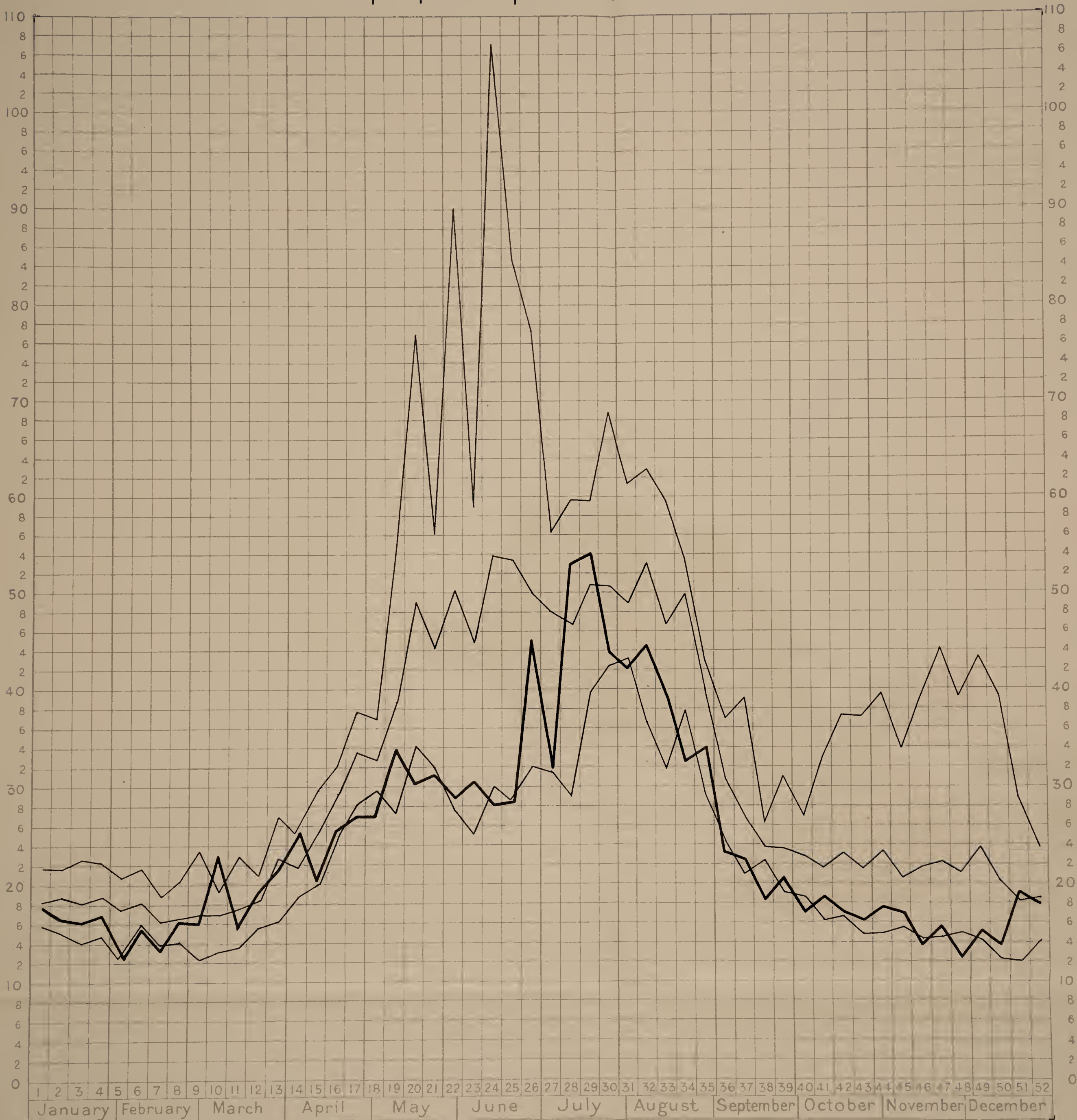
Printed by the Survey of Egypt. 21/440.

Year	Estimated mid year population.	Year	Estimated mid year population	Maximum, Minimum and Mean rates.
1914	725,670	1917	749,000	Weekly death-rates in 1919.
1915	733,423	1918	760,008	
1916	740,000			





Cairo City Infantile Mortality Children 0-1  
in quinquennial period 1914-1918.



Printed by the Survey of Egypt. 21/440.

Maximum, Minimum and Mean of weekly death-rates per 10,000 births.  
Weekly death-rates per 10,000 births for 1919.











SMALL POX



Printed by the Survey of Egypt . 21/440 .

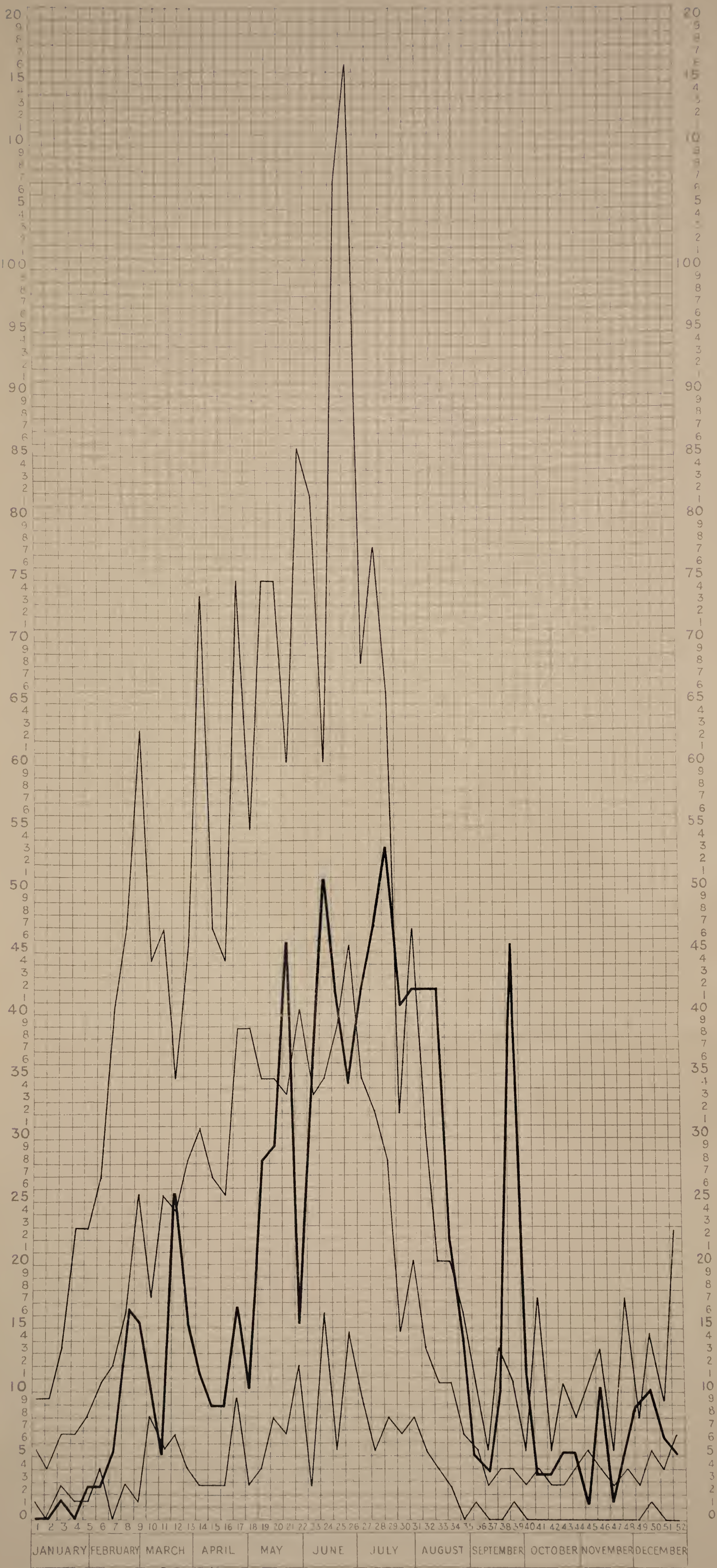
Weekly Maximum, Minimum and Mean number of cases estimated per million of population 1914-1918.  
Weekly Total of cases in 1919.







MEASLES

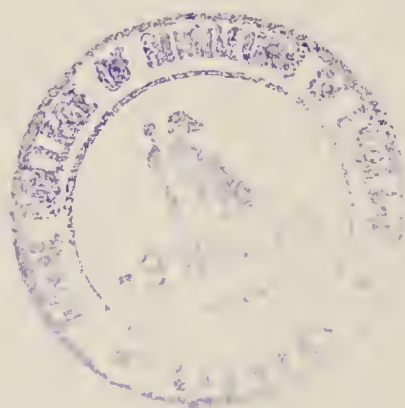


Printed by the Survey of Egypt. 21/440.

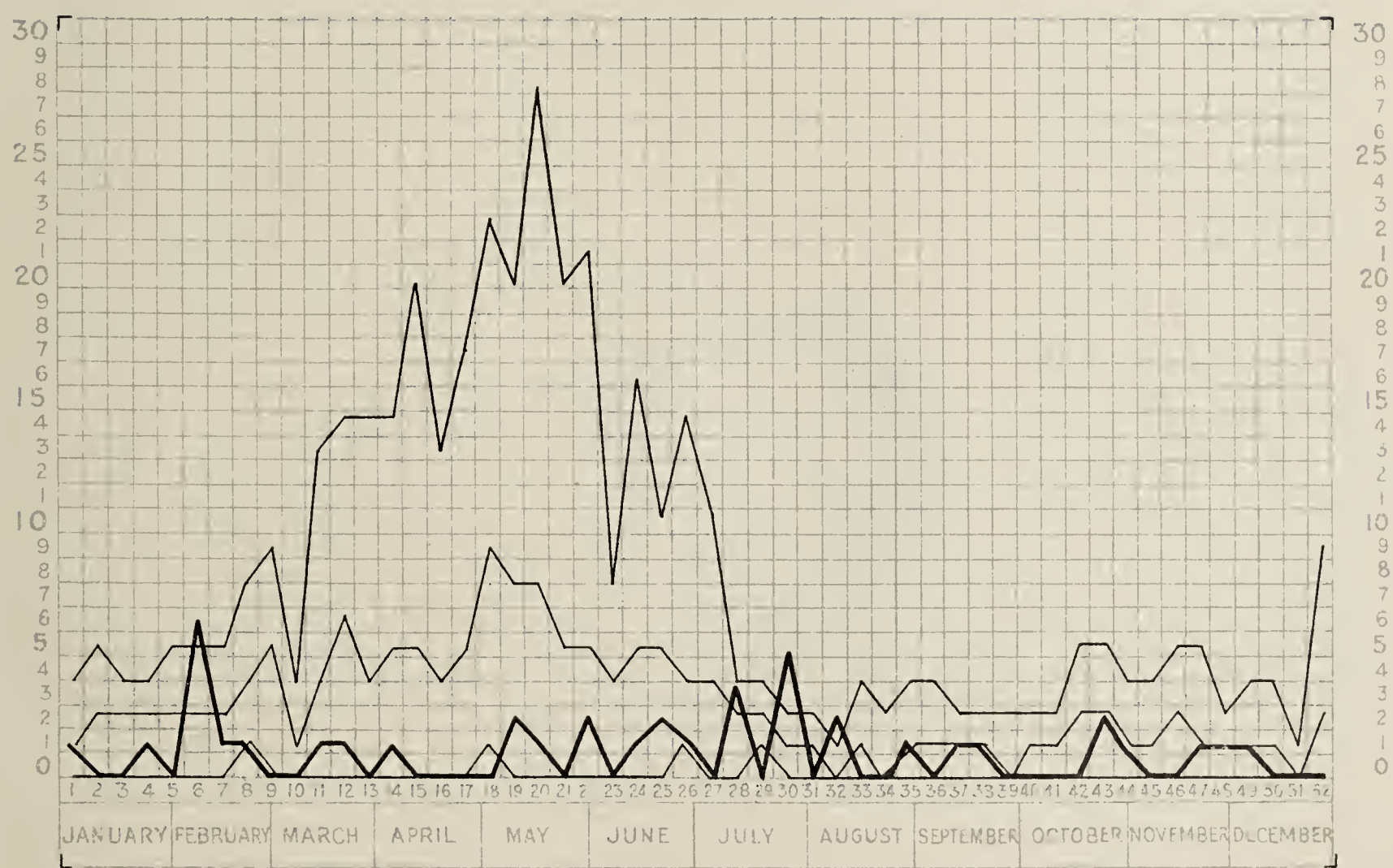
Weekly Maximum, Minimum and Mean number of cases estimated per million of population 1914-1918.

Weekly Total of cases in 1919.





SCARLET FEVER



Printed by the Survey of Egypt 21/440

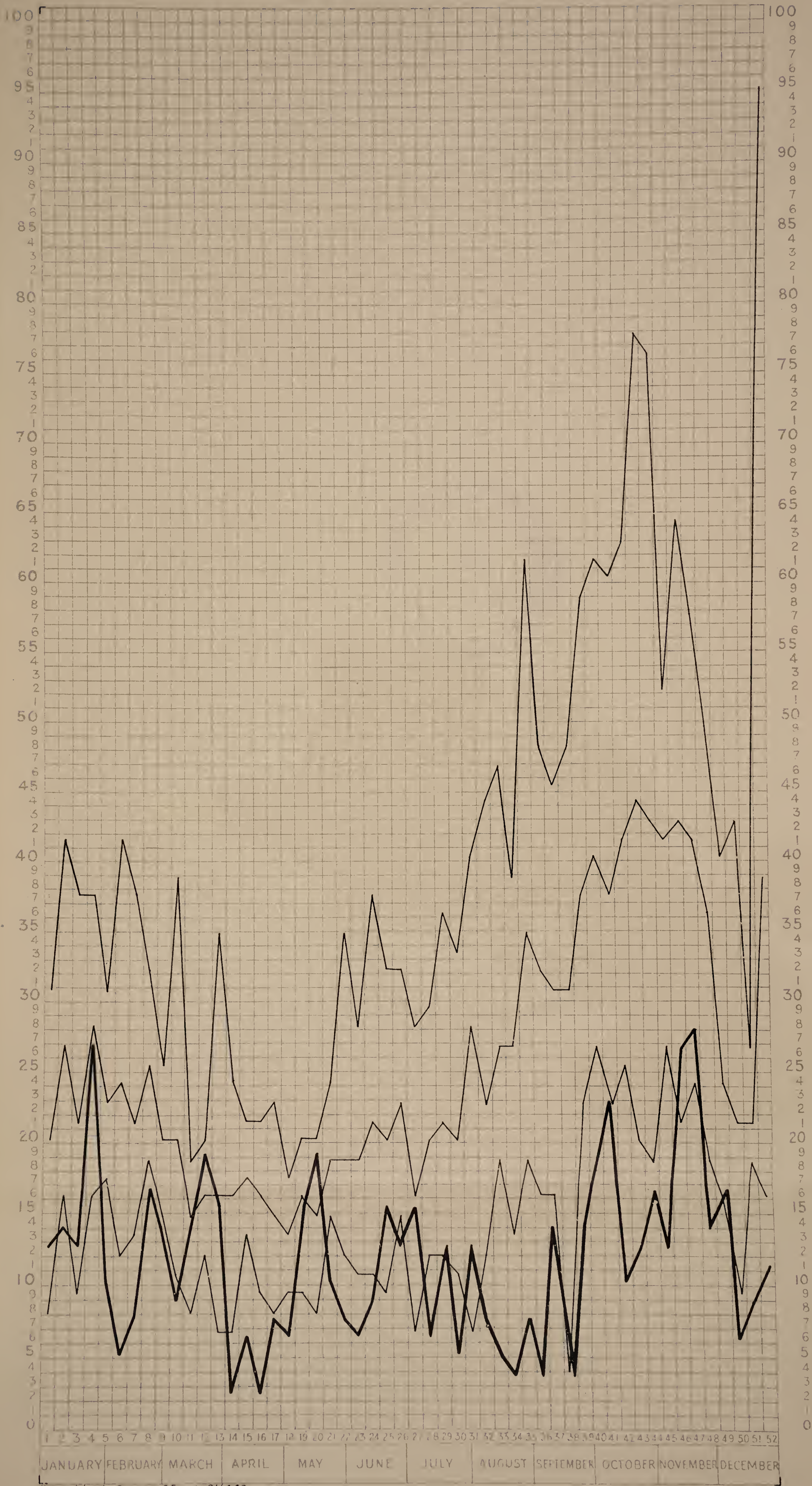
Weekly Maximum, Minimum and Mean number of cases estimated per million of population 1914-1918.  
Weekly Total of cases in 1919.







DIPHThERIA



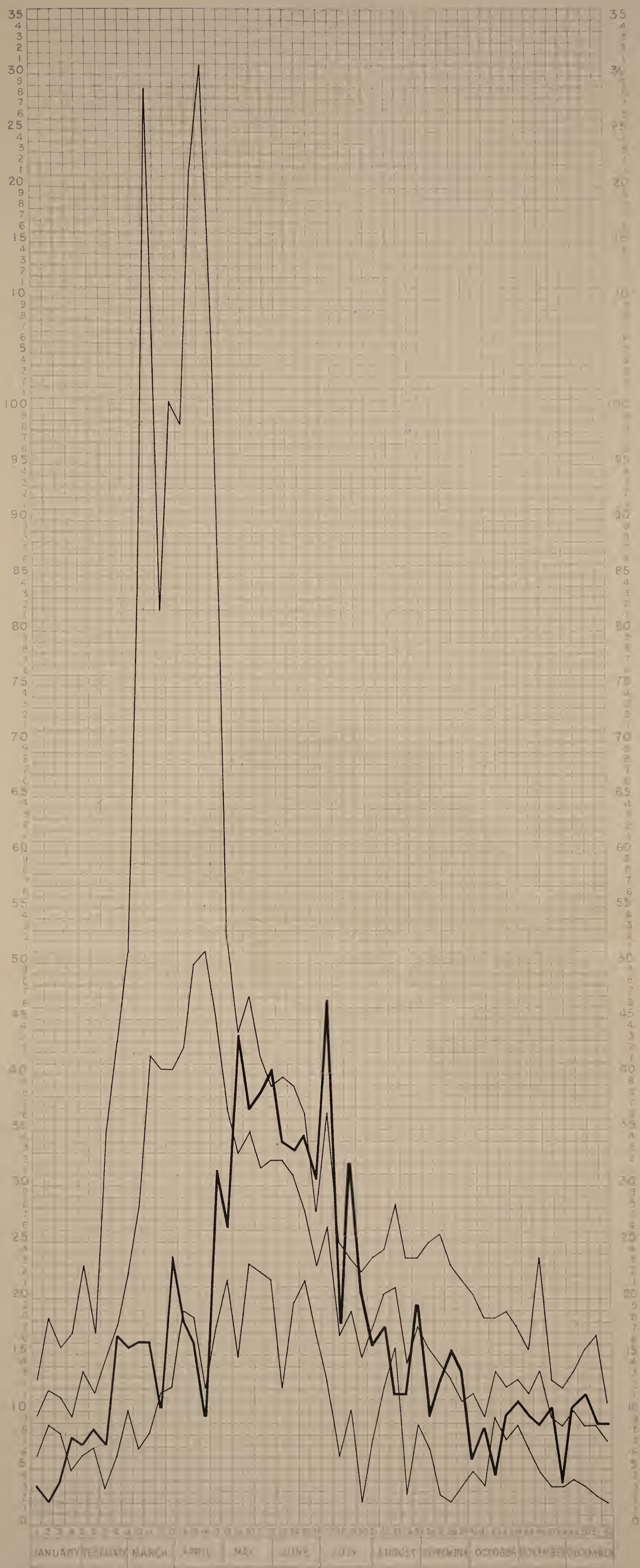
Printed by the Survey of Egypt, 21/440

Weekly Maximum, Minimum and Mean number of cases estimated per million of population 1914-1918.  
Weekly Total of cases in 1919.





TYPHOID FEVER



Printed by the Survey of Egypt . 21/440 .

Weekly Maximum, Minimum and Mean number of cases estimated per million of population 1914-1918.  
Weekly Total of cases in 1919.





TYPHUS



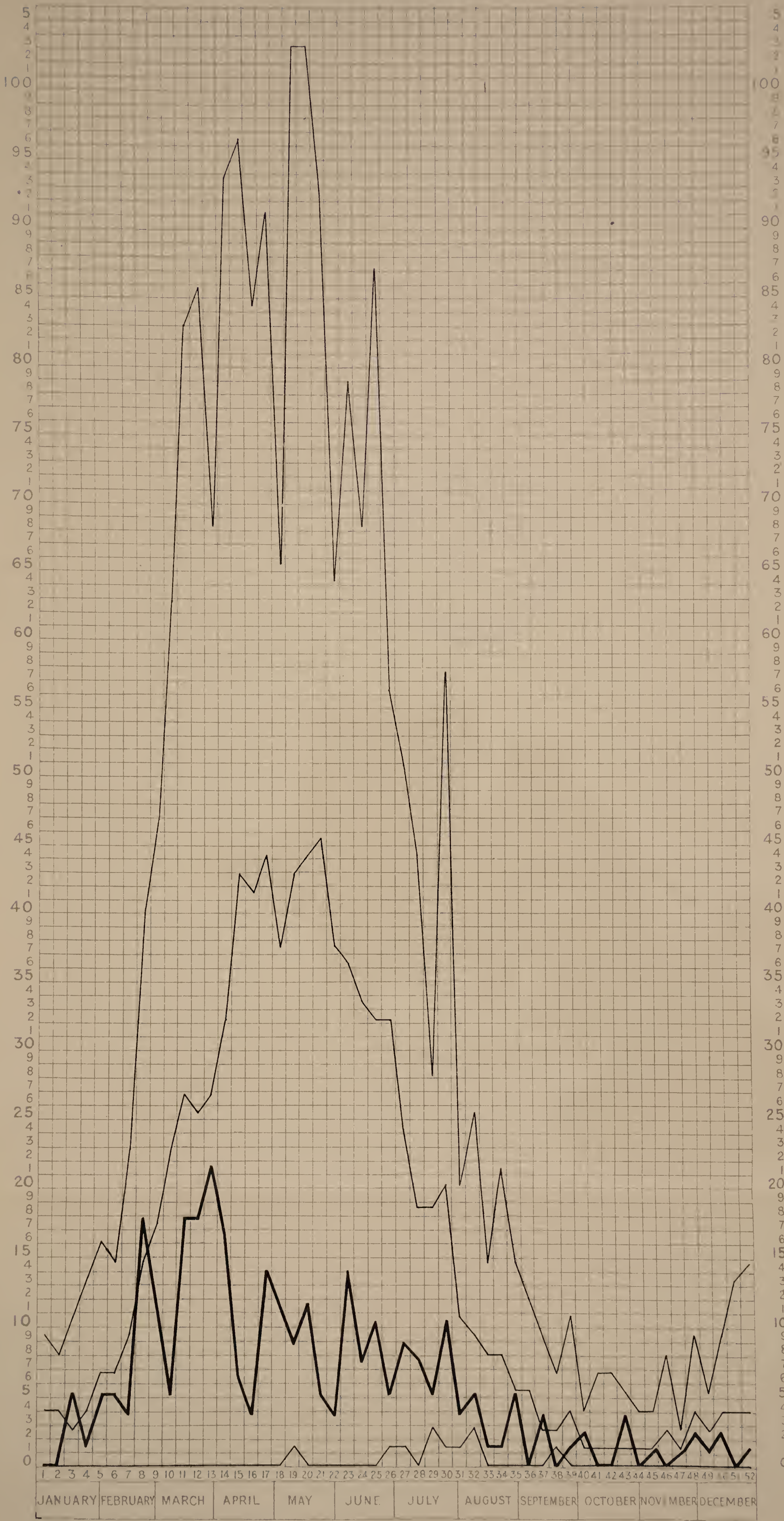
Weekly Maximum, Minimum and Mean number of cases estimated per million of population 1914-1918.  
Weekly Total of cases in 1919.







RELAPSING FEVER



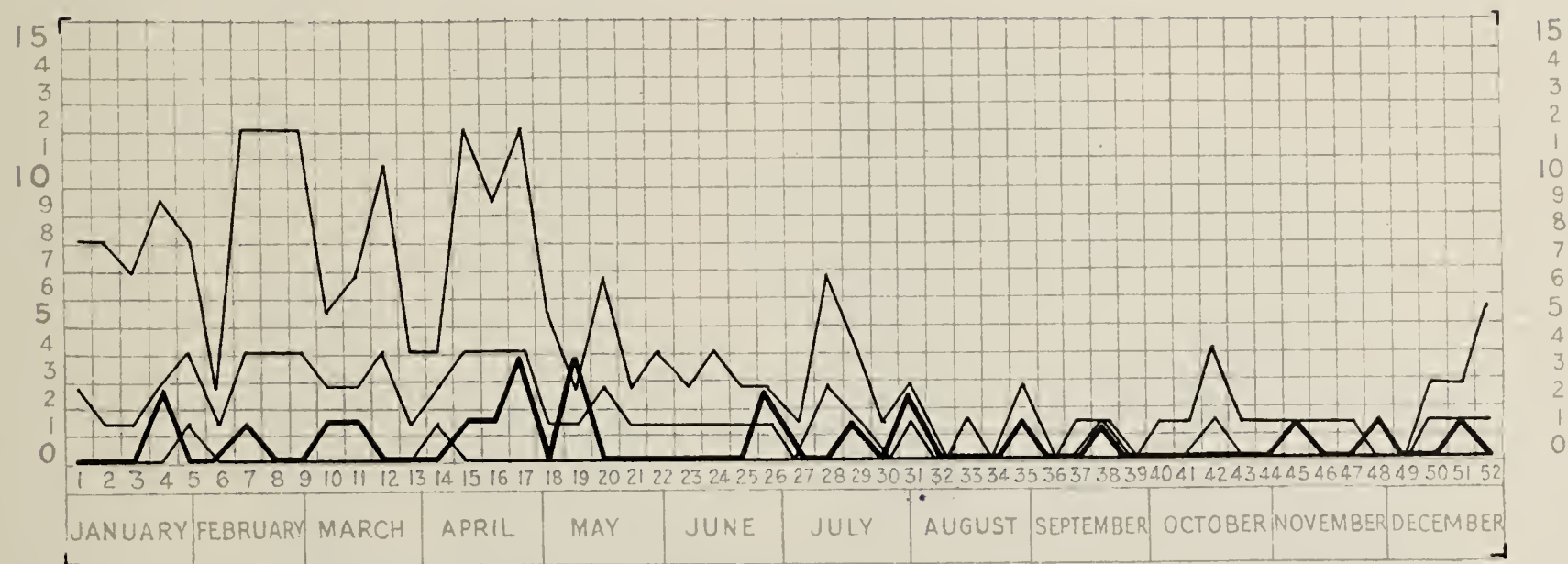
Printed by the Survey of Egypt 21/440.

Weekly Maximum, Minimum and Mean number of cases estimated per million of population 1914-1918.  
Weekly Total of cases in 1919.





CEREBRO-SPINAL FEVER



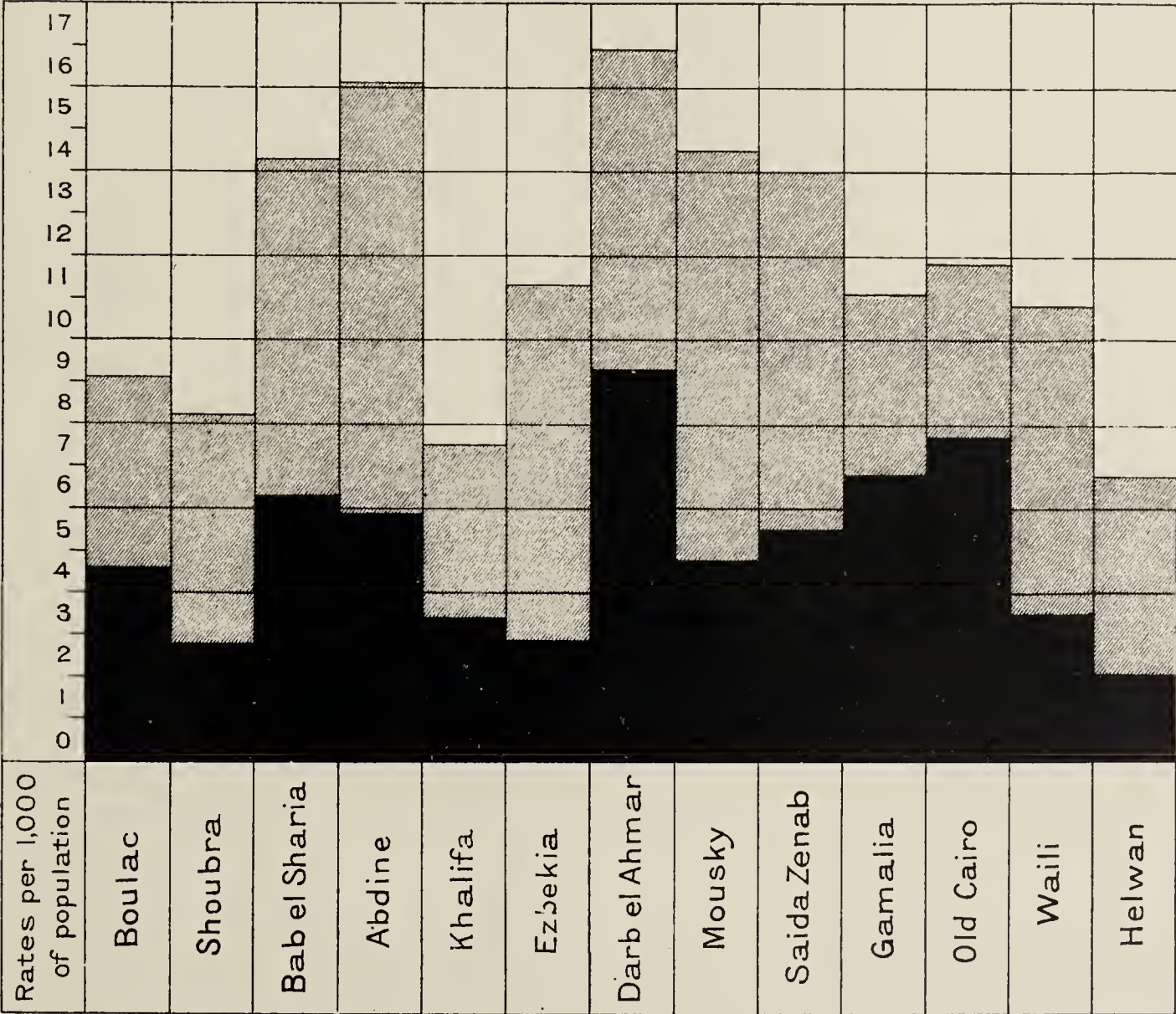
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\_\_\_\_\_ Weekly Maximum, Minimum and Mean number of cases estimated per million of population 1914-1918.  
\_\_\_\_\_ Weekly Total of cases in 1919.





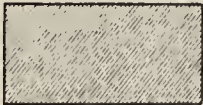
ZYMOTIC DISEASE CASE AND DEATH RATES IN CAIRO DISTRICTS  
IN 1919 PER 1,000 OF POPULATION



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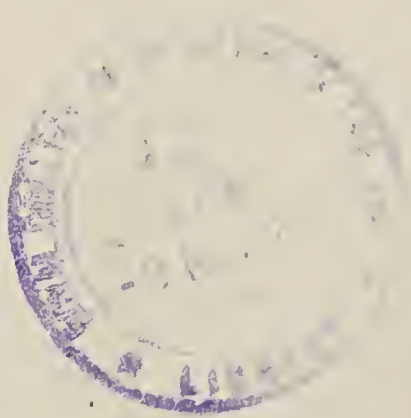


Deaths

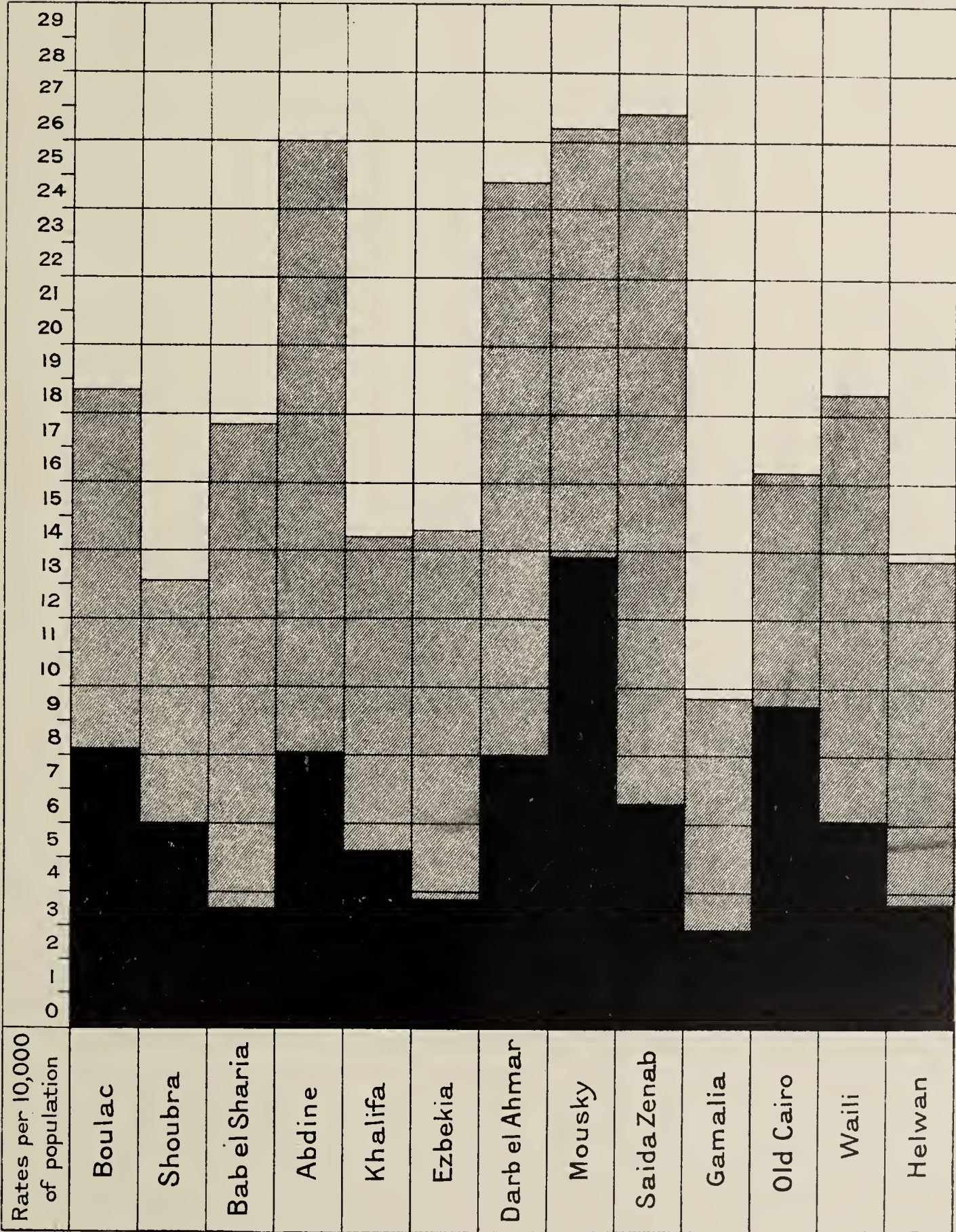


Cases recorded

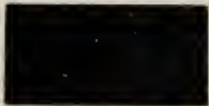




SMALL POX CASE AND DEATH RATES IN CAIRO DISTRICTS  
IN 1919 PER 10,000 OF POPULATION



Printed by the Survey of Egypt, 21/440



Deaths

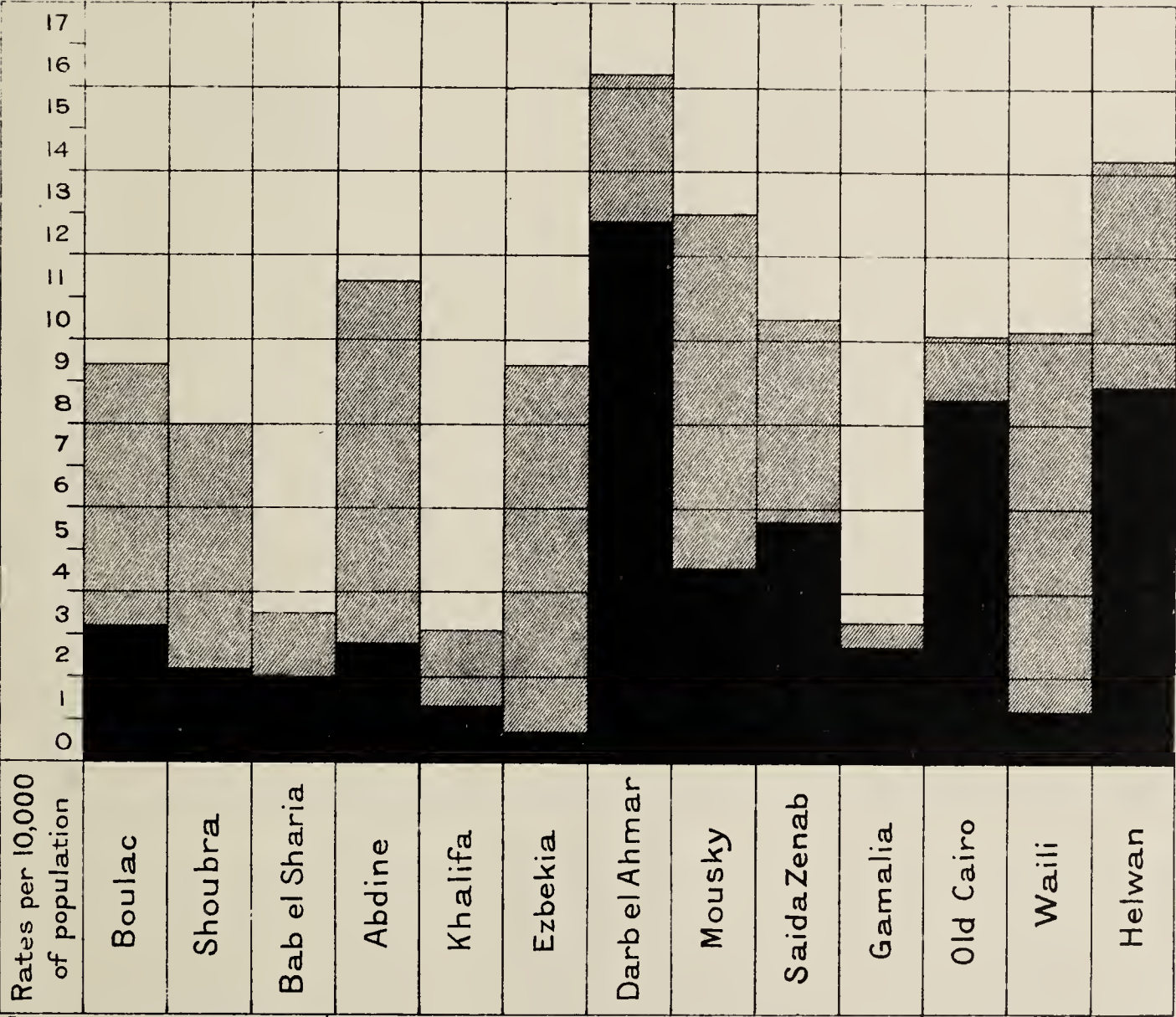


Cases recorded





MEASLES CASE AND DEATH RATES IN CAIRO DISTRICTS  
IN 1919 PER 10,000 OF POPULATION



Printed by the Survey of Egypt, 21/440



Deaths



Cases recorded





SCARLET FEVER CASE AND DEATH RATES IN CAIRO DISTRICTS  
IN 1919 PER 10,000 OF POPULATION

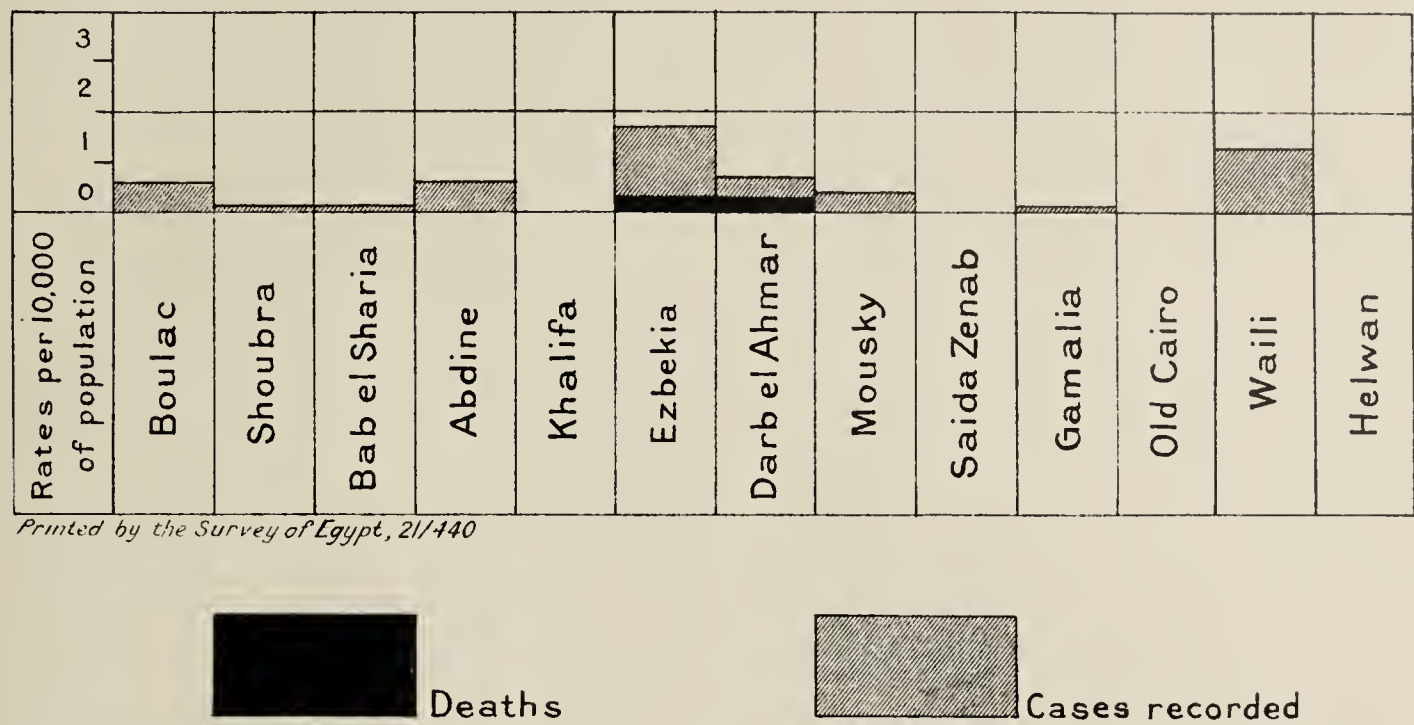
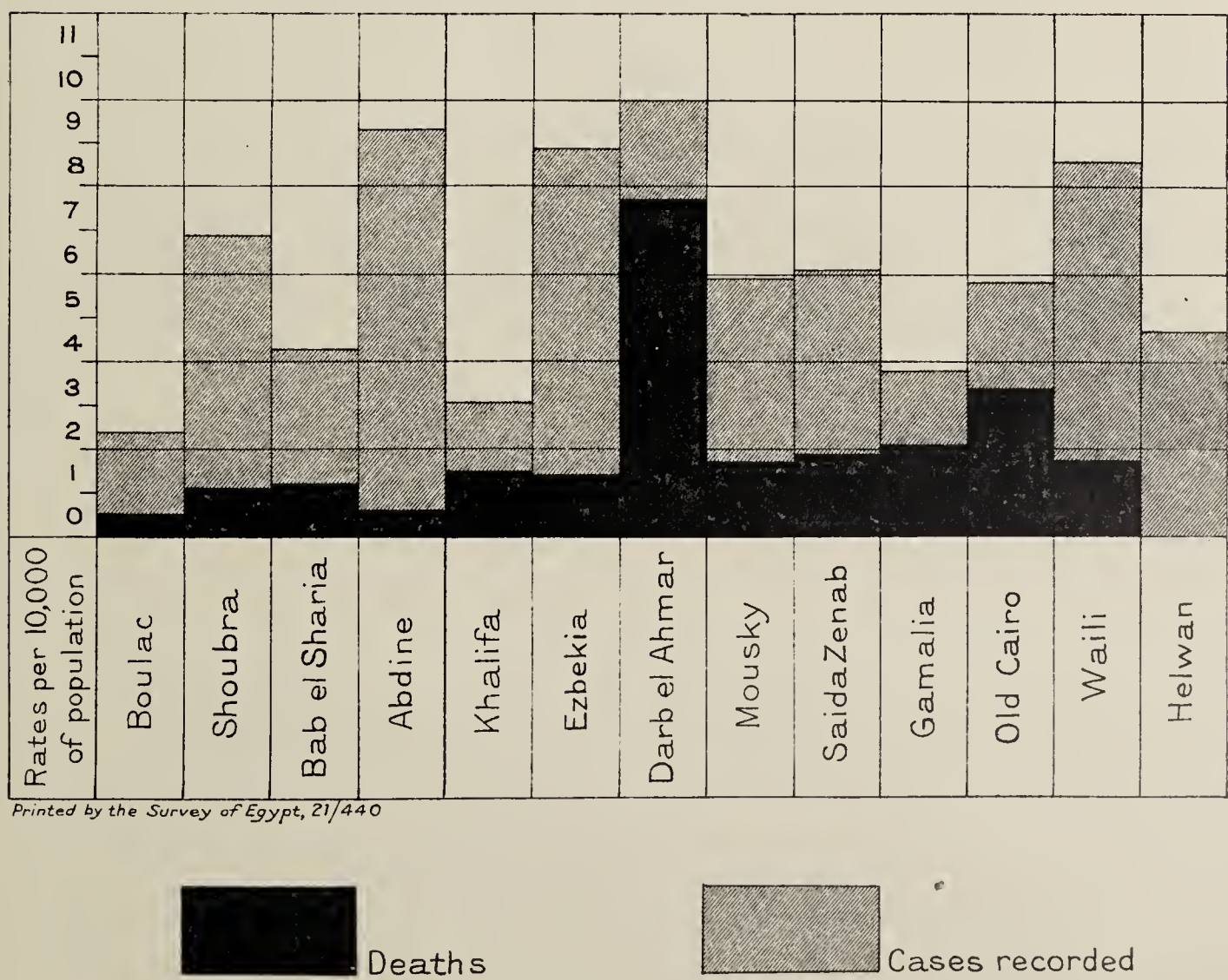
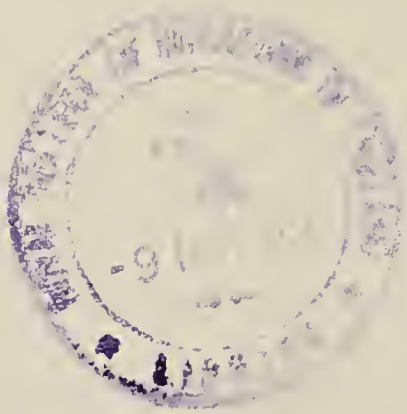


Fig. 5

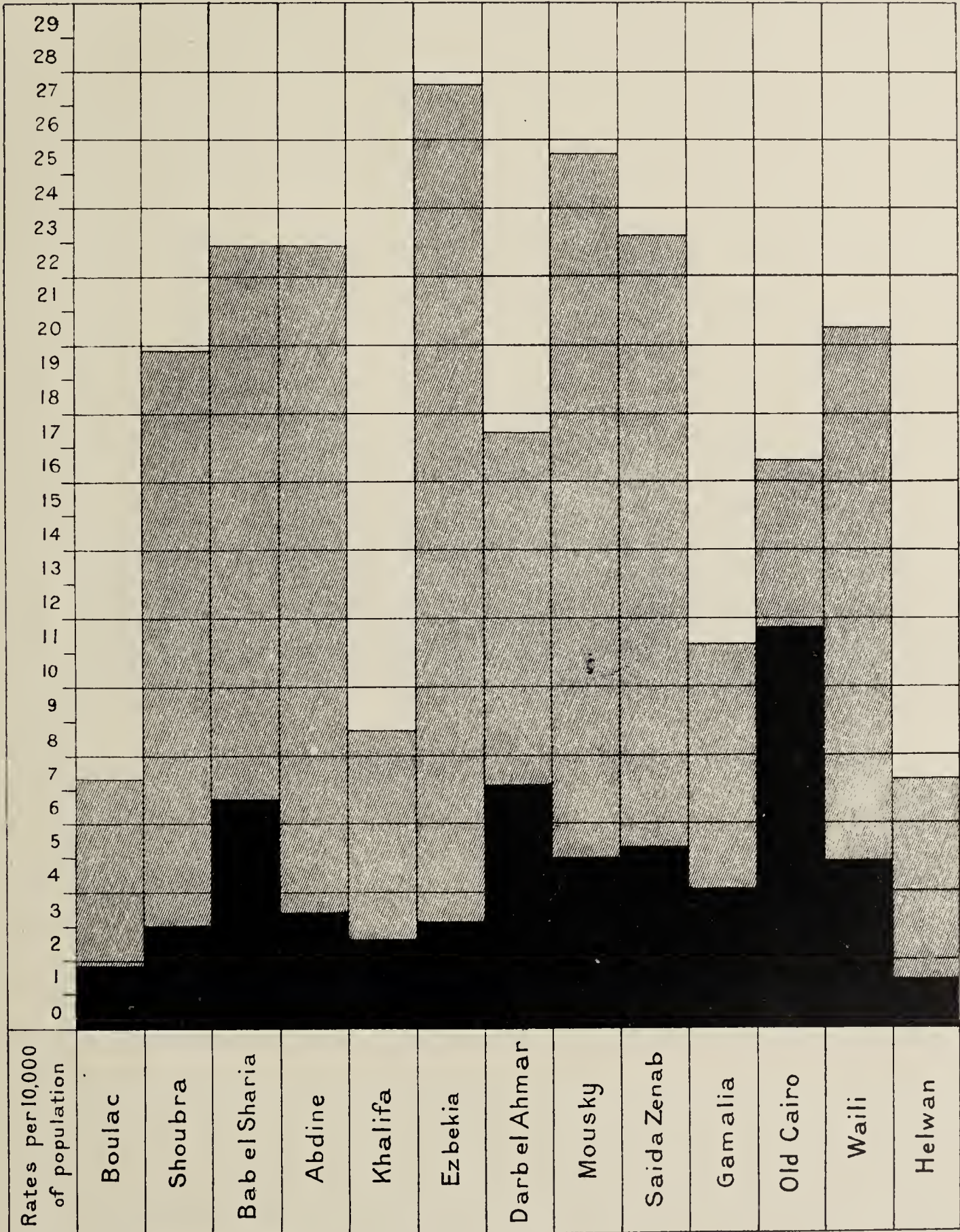
DIPHThERIA CASE AND DEATH RATES IN CAIRO DISTRICTS  
IN 1919 PER 10,000 OF POPULATION







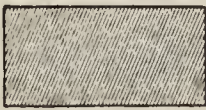
TYPHOID FEVER CASE AND DEATH RATES IN CAIRO DISTRICTS  
IN 1919 PER 10,000 OF POPULATION.



Printed by the Survey of Egypt, 21/440



Deaths

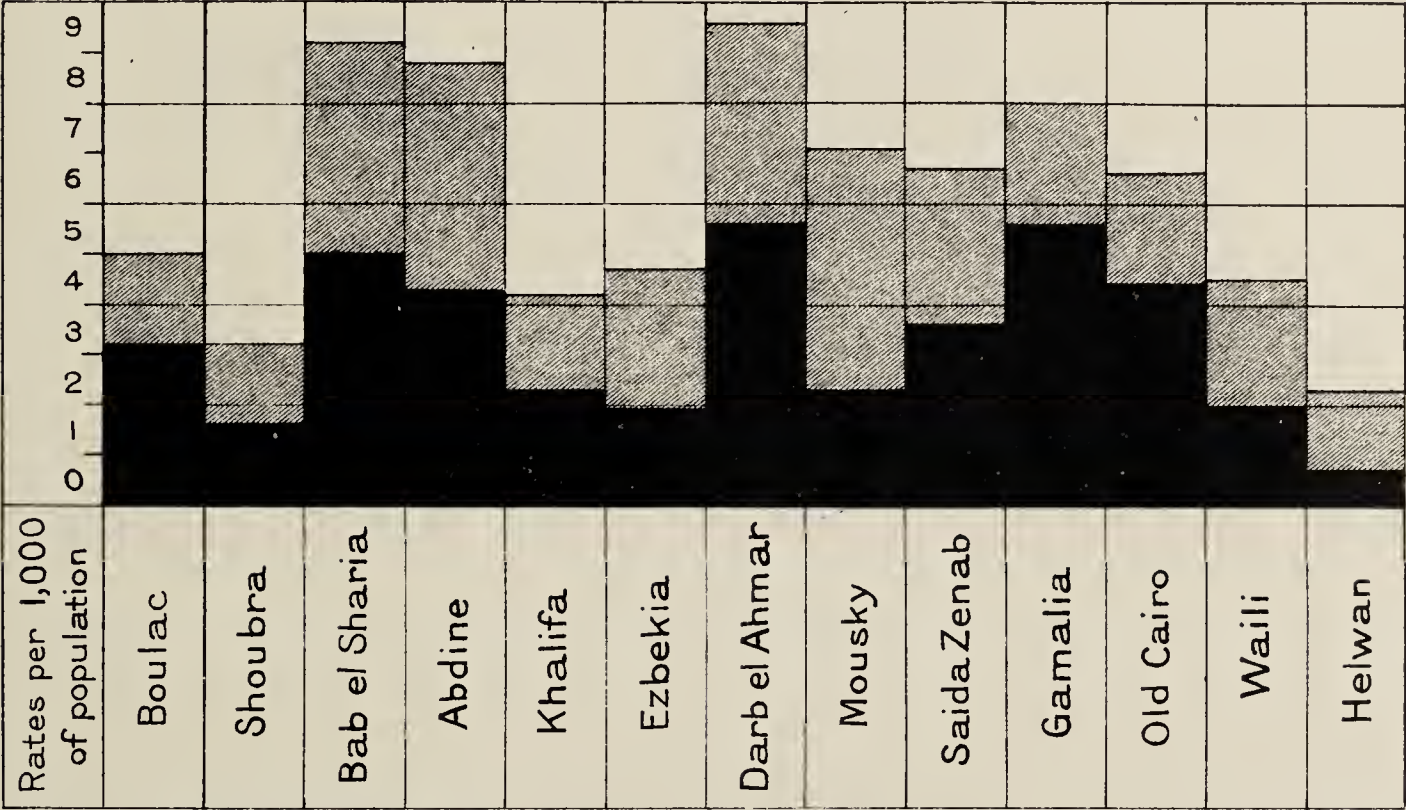


Cases recorded





TYPHUS FEVER CASE AND DEATH RATES IN CAIRO DISTRICTS  
IN 1919 PER 1,000 OF POPULATION



Printed by the Survey of Egypt, 21/440



Deaths

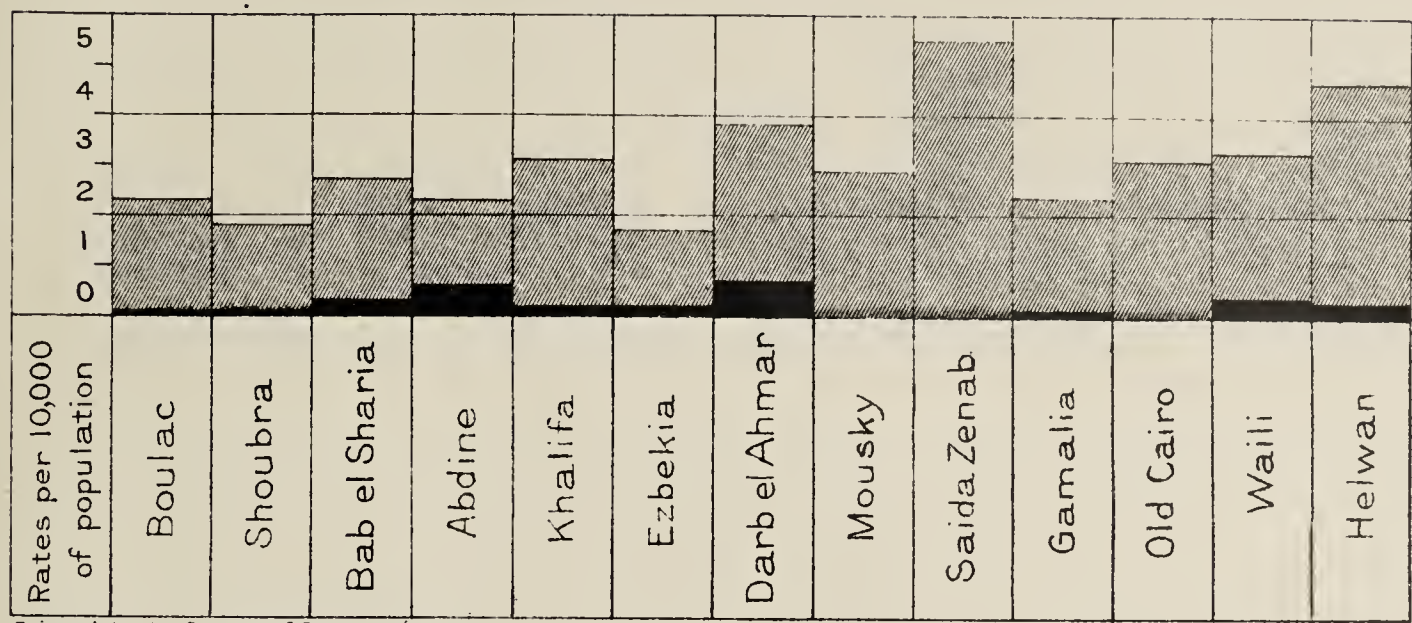


Cases recorded





RELAPSING FEVER CASE AND DEATH RATES IN CAIRO DISTRICTS  
IN 1919 PER 10,000 OF POPULATION



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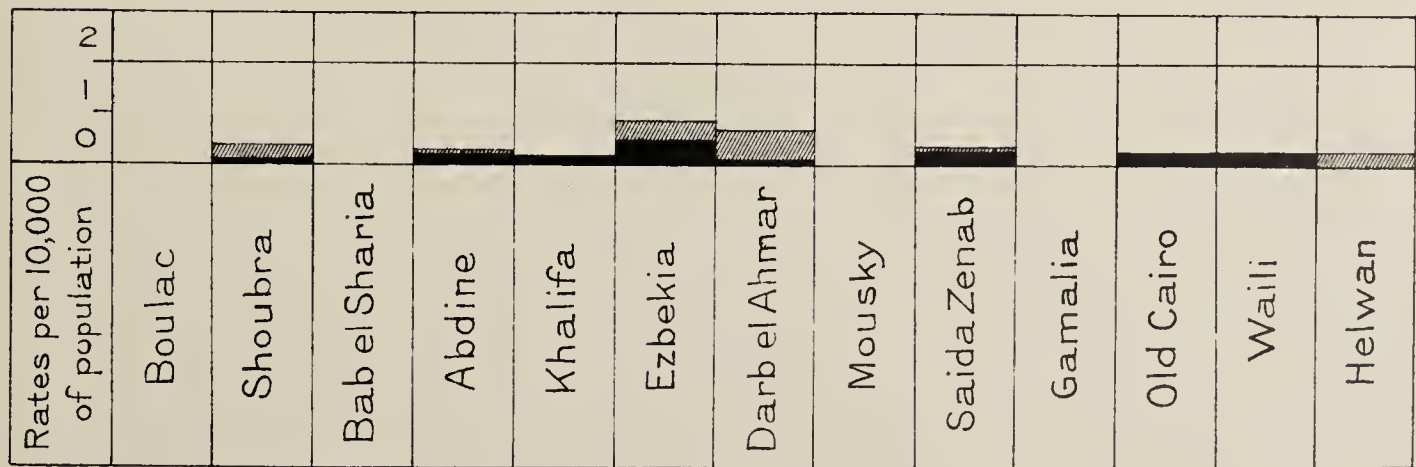
Deaths



Cases recorded

Fig. 9

CEREBRO-SPINAL FEVER CASE AND DEATH RATES IN CAIRO  
DISTRICTS IN 1919 PER 10,000 OF POPULATION



Printed by the Survey of Egypt, 21/440



Deaths



Cases recorded



